# Lumleian Lectures
ON
# SOME POINTS IN THE NATURAL HISTORY OF PRIMITIVE DRY PLEURISIES.

*Delivered before the Royal College of Physicians,*

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## LECTURE III.

MR. PRESIDENT AND GENTLEMEN,—In the last lecture I arranged, for the sake of convenience, the pathological changes in the lung resulting from primitive dry pleurisies under four heads, and I intimated that for each of these there was to be found a corresponding clinical state or autonomy. I proceed now to consider these clinical states, to describe their chief characteristic signs, and to show in what manner they may be distinguished from other states resembling them, but having a different meaning and importance. The former, for descriptive purposes, I shall name the neoplastic pleural membrane state, the fibroid lung state, the bronchiectatic state, and the phthisical fibroid lung state.

And first of all, concerning the neogenetic pleural membrane state. The patient may have the aspect of health, and experience no subjective indications of the presence of disease. If any exist, they will be limited to uneasiness or pain in the affected side, an occasional dry cough, feverishness, and general malaise. On rare occasions the patient may be conscious of the existence of pleural friction. The physical signs are a slight decrease, with some irregularity, of the thoracic movements of the affected side, some diminution of the tactile vocal fremitus,[1] just notable but unequal dulness on percussion, a shifting, rubbing or grating friction, enfeebled breath sounds, and an altered vocal resonance. In some cases, instead of pleural friction there may be heard crepitation, crackling, or clicking; and we shall know from the superficial characters of these sounds, from their resistance to respiratory efforts, and from their association with gratings or rubbings that they are of pleural origin. Having thus before us a dry pleurisy, we have to determine if it is a primitive or secondary affection. If there are signs of disease in the corresponding or in the opposite lung, it is probable that the pleurisy is secondary; and if without such signs there is grave constitutional disorder, it is equally probable that the pleural inflammation has arisen out of some pre-existing malady; and this pre-existing malady may exercise its causal influence either through some local growth, such as tubercle, lying beyond the range of physical detection, or through some constitutional state, such as adenoma or syphilis. On the other hand, if there exist no signs of local disease, and no serious symptoms of constitutional disturbance, it is presumable that the case is one of primitive dry pleurisy. This affection may arise from mechanical injury, or from cold, and it may be a local expression of such non-malignant constitutional disorders as rheumatism and gout.

The future course of a case of primitive dry pleurisy depends upon causes seldom visible or calculable, and is therefore absolutely uncertain. The signs of the malady may subside in a few weeks, or they may continue for months, or they may come and go for two or three years, and then either entirely disappear or invade the lung. Sometimes after a variable duration the dry stage issues in serous effusion, which pursues its ordinary course, and ends eventually in a thickened pleura and a contracted lung. In one case seen with Dr. Sedgwick, and in another seen with Dr. Warrington, it appeared as if the structural elements of an old adventitious pleural membrane developed through metaplastic processes into malignant fibrous growths. This result, however, must be infinitely rare; and when the health of the patient is good, and he can be placed under the conditions most favourable to the organism, clinical experience will warrant the expectation of complete recovery. Nevertheless, it occasionally happens, in spite of apparent good health and skilful care, that the inflammatory process invades the lung and brings about therein a more or less extended fibroid induration. This fibroid lung state is of frequent occurrence, and from the mistakes liable to be made concerning it, and the course which it commonly follows, it is a subject of great importance as well as of great interest. It certainly demands, and will certainly repay, an extended and a critical study. We have, in the first place, to make sure that we are dealing with a fibroid lung state. What seems to be a simple fibroid induration[2] may be something quite different; or it may be that and something more. It may be essentially a tubercular consolidation with an unusually large amount of secondary fibroid growth; it may be a chronic caseous pneumonia; it may be a pleuritic effusion; it may be a malignant growth; and it might be several other things which for practical purposes need not now be considered. If the case has been followed from the beginning, no serious difficulties of diagnosis will be encountered; but if, as usually happens, the patient is not seen until the pulmonary consolidation is advanced, the greatest care will be required to avoid falling into serious error, and to succeed in framing a correct judgment. If there are no serious symptoms of constitutional distress; if there is no elevation of temperature and no hurry of circulation; if flesh, colour, and strength are little, if at all, affected; if in the consolidated lung there are no signs of disintegration, and in its fellow lung no indications of advancing and spreading disease,—the question of tuberculosis may be settled in the negative. And it may be so settled conclusively if after repeated examination of any sputum which may be ejected no tubercular bacilli are found therein.

With respect to caseous consolidations, they are of two sorts: one which is tubercular, and one which is not. From simple fibroid induration, the former may be distinguished by the presence of tubercular bacilli in the sputum. And as to the latter, if there is no history of a feverish illness; if there is no elevation of temperature, or quickness of the pulse, or cough, or expectoration; if there is material retraction of chest, with diminution of tactile vocal fremitus; if no râles are heard within or around the consolidated lung; and if the vocal resonance is either diminished or not increased,—then the hypothesis of any sort of caseous consolidation must be abandoned. Furthermore, if the patient has no cachectic appearance; if there are no irregular retractions of chest, no depression of shoulder and nipple, no pushing outwards of the lower part of the scapula; if, with extensive consolidation, there are no pains or signs of pressure, no extension of dulness beyond the normal limits of the lung, no displacement of heart, no distress of breathing with blood-stained expectoration, no rapidity of pulse without notable elevation of temperature,—it may be said with all but absolute certainty that a malignant growth is not the cause of the consolidation.

But in fibroid lung the condition which by far the most frequently gives rise to mistakes in diagnosis and errors in practice is pleural effusion. To mistake an ordinary and considerable serous effusion for a fibroid lung can happen only from want of competence or want of care. The fixed and rounded side; the tumid or even bulging intercostal spaces; the dulness, varying with position; the feeble breath sounds, except near the spine, where they are bronchial; the diminished resonances; the displaced organs,—if duly examined and considered forbid peremptorily every interpretation but one. Happily, however, the danger of mistake does not lie in this, but in an opposite direction; it lies in supposing that a solid fibroid lung is a fluid effusion. And here it must be confessed that, when the effusion is moderate in quantity and of long-standing, when the dulness does not vary with position and there is no displacement of organs, when the signs of local disease have descended from an acute pleurisy and there is no account of pulmonary disease, the difficulties of diagnosis are great and not always, without exploratory operations, overcome. For in both conditions, in the moderate fluid effusion and in the indurated lung, there are to be found diminished respiratory movements of the affected side, toneless dulness on percussion, decreased tactile vocal fremitus, feeble, hollow, or suppressed respiratory murmurs, and lowered as well as

[1] I do not forget that Dr. Walshe has spoken otherwise; and it is only after careful investigations, often repeated, that I venture to differ from one of the most accomplished auscultators of our time.

[2] Or, to use another terminology, an interstitial pneumonic consolidation, cirrhosis, sclerosis, or iron-grey induration.

altered vocal resonances. Nor, indeed, do exploratory operations always overcome these difficulties. Fluid may be present, and none be withdrawn by the needle. It may not penetrate the thick and hard pleura; it may carry the membrane before it, or it may become blocked by débris. But, notwithstanding this close similarity of physical signs between affections so widely different, grounds of distinction between them, if narrowly sought for, may be in most cases discovered. In the first place, the continuous history of an illness beginning with an unmistakable pleurisy, and passing straight into a basic dulness of doubtful nature, points strongly, but not necessarily, to fluid effusion; not necessarily because a fibroid induration, although it sometimes originates and advances unattended by inflammatory or other local or general symptoms, occasionally arises in, or immediately follows, a pleural inflammation; or is begotten by substitution out of an unabsorbed pneumonic exudation. In the second place, if we are dealing with a fluid, and especially if that fluid be purulent, there will probably be present some degree of fever, and almost certainly some acceleration of pulse; in a fibroid consolidation there need be neither the one nor the other. In the third place, if fluid be present and confined to a portion of the pleural sac, the side, although generally flattened or retracted, will be swollen over the part where the fluid is collected; the intercostal spaces will be effaced or more or less bulged; the diminution of the tactile vocal fremitus will be uniform; the dulness on percussion will be more diminished in volume, raised in pitch, shortened in duration, and lessened in resistance than when dealing with a fibroid induration; the breath sounds will be feeble or suppressed; there will be no râles; and the vocal resonance lowered and altered may be ægophonic. In the fourth place, we may conclude that we are dealing with a solid lung if, with the signs already described, we find that the affected side is everywhere, and especially irregularly, contracted, that the intercostal spaces are deepened, that the dulness is accompanied by great hardening and resistance, that the tactile vocal fremitus, much diminished, is unequal throughout the dull region; that there is rubbing or creaking; that there are râles of any description, superficial or deep; that the vocal resonance, increased or diminished, and varying at different parts, has a metallic quality; and that there is some, however slight, displacement of organs to the affected side. Having thus cleared away the various sources of error in diagnosis, and having made sure that we are dealing with a fibroid lung, I proceed to set forth its clinical characters and course.

I shall, in the first place, consider the local physical signs, and in the second, the constitutional state. Among many descriptions drawn from life of the physical signs of fibroid lung I possess in particular two, one of which was written in conjunction with Dr. Pollock in 1868, and one with Dr. Douglas Powell in 1885. As concrete examples will strengthen the general description, and as the authority of those justly distinguished physicians will stamp with accuracy the relation of the physical signs in the cases examined, I herewith reproduce them

*Dr. Pollock's case, examined with Dr. Andrew Clark, October 21st, 1868.*—A farm labourer, well nourished, rosy, and of healthy aspect, fifty-seven years of age, and of regular and temperate habits, complains of occasional cough, slight morning expectoration, and breathlessness on exertion. His father died at sixty from renal disease; his mother, aged eighty-six, is alive and well; two sisters are living and in good health; two brothers and sisters died from causes unknown. In 1860 the patient had trouble, presumed to be pleuritic, in his left side, and after some weeks got well. In February, 1868, eight months before this examination, the patient caught cold, shivered, felt sharp pain in the left side, became feverish, had a little cough, and was confined to bed; had night sweats some time in March; in April or May was well. The digestive organs are in fair condition; the urine is abundant, sedimentary, of low density, and contains a considerable amount of albumen. The left side of the chest is flattened from the clavicle to near the nipple, in the lower part of the axillary region, and about the posterior base. The impulse of the heart is felt immediately under the left nipple, and its action, unaccompanied by murmurs, is normal; the pulse is about 80.

*Examination of left side.*—Above the clavicle the percussion note is normal; from second rib to anterior base, except near the sternum, there is absolute dulness, which nowhere passes the median line. In the lower half of the axillary region, and posteriorly from the spine of the scapula to the base of the lung, there is marked and increasing dulness; in front, from summit to nipple, in the upper half of the axillary region, and posteriorly in the supra-spinous fossa, and for a little way below the spine of the scapula, the tactile vocal fremitus is increased; elsewhere it is in different degrees at different parts demolished. Upon auscultation the following signs are elicited. In the supra-clavicular region there is normal vesicular breathing, but an occasional wheeze is heard at the close of inspiration, and the expiration is prolonged. From the clavicle to the second rib the inspiration is rustling; the expiration prolonged and blowing. Between the second rib and the nipple the respiration is bronchial and the vocal resonance is altered and increased. From the nipple to the anterior base the respiratory sounds and the vocal resonance are suppressed; only a faint creaking, crackling, or rumbling is heard. In the upper part of the axilla there are heard pleural creaking, bronchial breathing, and a modified bronchophony; in the lower part all sounds are suppressed. In the supra-spinous fossa the respiratory sounds are loud, harsh, and accompanied by crepitation, which, on coughing, becomes a crackle. There is no increase of vocal resonance. From the spine of the scapula, where they are weak and hollow, the respiratory sounds become fainter towards the base, and are there wholly suppressed. In no part of the right lung can any sign of disease be discovered. In 1878 the patient was reported to be in the same condition; but since then he has not been seen.

*Dr. Douglas Powell's case, examined with Sir Andrew Clark on Jan. 7th, 1885.*—The patient is a dark, stout, florid, healthy-looking man of fifty-four, and has no complaint except that he is breathless on exertion, and that he gets a little cough and expectoration in cold and damp weather. He has been slowly gaining flesh and strength for the last six years. In 1863 or 1864 patient had some serious trouble in his left side, and was ill for seven weeks. In 1866 he had a fresh illness with pains in his left side, and "a feeling as if there were two holes in his lung when he took deep breaths." Was first seen in November, 1867, by Dr. Andrew Clark, who reported the case to be one of chronic dry pleurisy, with secondary fibroid induration of the lung. About this time he was for six months an inmate of the Brompton Hospital, where he was repeatedly examined by Dr. Douglas Powell. The left side of the thorax is flattened and irregularly retracted, rises imperfectly and unequally on inspiration, and measures on the level of the nipple sixteen inches and a half, being one inch and a half less than the measurement of the opposite side at the same place. The left shoulder is depressed and angular; the left nipple corresponds to the fifth rib. The lower part of the axillary region is protuberant, and the upper retracted. The inferior angle of the scapula juts outwards from the ribs. The impulse of the heart is felt under the left nipple, and its action is slow and normal; the pulse is full, soft, and compressible. The percussion note, slightly tubular in the supra-clavicular space, and normal just below the clavicle, becomes increasingly dull to the base, where the dulness is absolute. In the axillary region there is dulness throughout, slight above, moderate in the middle, absolute at the base. Posteriorly dulness begins below the spine of the scapula, and increases to the base. The tactile vocal fremitus, normal at the summit and increased at the middle of the axillary region, is everywhere else either greatly diminished or entirely suppressed. About the summit of the lung the respiratory sounds are harsh, but of the vesicular type, and the expiration is prolonged; there are, however, no râles. About the middle of the axilla there are heard superficial creaking or rubbing, with occasional coarse crepitation and dry rhonchi, elsewhere the respiratory sounds are feeble, hollow, distant. The vocal resonance, loud in the supra-clavicular region and just below the clavicle, is bronchophonic in the middle and upper part of the axilla; at the base it is suppressed, and in other parts diminished. The right side of the thorax, full and rounded, rises fully on inspiration, and yields to examination no evidence of disease. The digestive organs are in excellent order. The urine, with less than an average discharge, has a specific gravity of 1014, is acid, clear, and contains no trace of albumen or of sugar.[3]

From these two cases, average specimens of their class,

[3] Since the delivery of this lecture Dr. Douglas Powell has reminded me that on more than one occasion the urine of this patient has been slightly albuminous.

a tolerably complete account may be obtained of the physical signs characteristic of the fibroid lung, and from the records of Dr. Douglas Powell's case one will now see how one may reasonably demur to the propriety of designating by the term chronic interstitial pneumonia a state of lung which has been quiescent for years, develops no general symptoms, and is compatible with more than average health. In these circumstances the terms sclerosis or fibroid ought, I think, to be preferred, inasmuch as they indicate with sufficient accuracy the physical characters of the pathological change, involve no hypothesis, and may, whilst hypotheses change, remain unchanged.

The local physical signs of pulmonary fibroid induration of moderate extent may be now formally enumerated, and they are as follows. The disease is commonly unilateral; the affected side is irregularly flattened or retracted; the shoulder is depressed, the lower angle of the scapula is tilted outwards, the spine is sometimes a little twisted, and the respiratory movements, especially the movement of expansion, are defective and irregular. The tactile vocal fremitus is diminished; there is more or less dulness on percussion; pleural rustlings, crepitations, cracklings, creakings or frictions are always at some time audible; the respiratory sounds are usually feeble, hollow, distant; from time to time there are crepitations which are often of a metallic quality, with moist or dry mucous rhonchi.

Such are the physical signs in favourable cases of fibroid lung, where the elasticity of the parenchyma is but moderately diminished and its nutritive conditions are not seriously disturbed. When, however, the base of the lung, surrounded and invaded by indurated lymph, has lost a great part of its elasticity, and the bronchial mucosa, stimulated by undue supplies of altered blood, secretes a more or less viscid mucus which cannot be expelled, bubbling rhonchi of metallic quality are heard in the affected region, and there arise recurring paroxysms of cough, which succeed, only by the help of retching, in emptying the bronchial tubes. Although this condition invades the comfort of the patient, it does not, unless greatly aggravated, seriously injure the health or obviously limit the duration of life. But when the lung becomes more and more rigid, and the bronchial tubes fill more easily with secretion, which is with increasing difficulty expectorated, the patient begins to suffer, and through secondary congestions, consolidations, emphysemas, and perhaps bronchial dilatations, both health and life are placed in peril. The constitutional symptoms accompanying fibroid lung vary according to the state of the induration. When this is not advanced enough to destroy the pulmonary elasticity, when the bronchial secretion is not in excess of what can be easily expectorated, and when the patient is kept under favourable physiological conditions, the general health is little if at all affected. It is true that he becomes breathless on exertion, that his general power of resistance to disturbing causes is lowered, and that from small provocation he falls into bronchial gastric or vesical catarrhs. Nevertheless, with just guidance and loyal obedience to it the patient may continue beyond the average duration of life to live and work. On the other hand, when the induration has destroyed the elasticity of the pulmonary parenchyma and the bronchi are filled for hours with sputa, which cannot be discharged, and perhaps undergo septic change, the constitution suffers; sometimes there is gastric, hepatic, and enteric catarrh; sometimes the urine falls in density and becomes more decidedly albuminous; sometimes the face and neck become swollen and the veins of the affected side enlarged; sometimes the feet become œdematous; and always, even with increased frequency of pulse, the temperature falls below the normal standard. But even in these conditions, with his comfort invaded and his capacity for work narrowed, the patient may return to the favourable stage of his malady, or without doing so may reach the longest term of life. The albuminous urine existing in the great majority of cases of fibroid lung seems to be of small importance in its earlier stages. But in its later and more unfavourable stages, when the bronchi are almost always loaded, and the lung becomes increasingly hard and congested, and the circulation is hurried and feeble, and the skin cold and harsh and dry, the condition of the kidneys becomes greatly aggravated, and at last puts an end to life. Indeed, in the greater number of cases, it is the renal and not the pulmonary affection which puts an end to life.

Proceeding now to the bronchiectatic lung state, I have to observe that its clinical characters have been elsewhere so admirably and exhaustively described that I do not feel justified in occupying the time of the College by giving another description, which I could not execute so well, and to which I could add so little. Nevertheless, I desire to notice some points in the clinical history of bronchiectasis, either because they have not been dwelt upon before, or because they have been inadequately or erroneously described. In the first place, the general condition of the bronchiectatic patient differs materially from the subject of tubercular phthisis on the one hand, and of fibroid lung on the other. Pale or cyanosed, for the most part thin and stooping, distressed by paroxysms of cough and drained by discharges of purulent and sometimes fetid expectoration, the subject of bronchiectasis displays a combination of mental and bodily engergy not to be met with in any other disease. In the second place, whilst in fibroid lung the disease is for the most part unilateral and in tuberculosis bilateral, in bronchiectasis both forms occur in nearly equal numbers. In the third place, whilst bronchiectasis resembles fibroid (for which it could not well be mistaken) in temperature, circulation, forms of cough, kinds of expectoration, conditions of breathing, absence of malaise, and slowness of general progress, it differs in almost all these points from tubercular phthisis, with which it is frequently confused and has nevertheless little in common. In the fourth place, whilst the excavations of fibroid occur at any part of the lung and the excavations of tubercular disease at its summit, and whilst the excavations of both, when they are multiple, appear in groups without definite form or order, the dilatations of bronchial tubes, found more frequently at first in the middle and lower than in the upper lobes, are arranged in order along the bronchial ramifications. In the fifth place, whilst the excavations of fibroid and tubercular disease arise in the midst of consolidations, the bronchial dilatations have no necessary relations to them, and, although commonly surrounded by fibroid induration, may be often found in the midst of apparently unaltered lung. In the sixth place, although bronchial dilatations may be unsurrounded by peribronchial thickenings, or by pulmonary induration, chronic pleuritic neoplastic membranes are never absent. In the seventh place, when several cylindrically dilated bronchi lie near to each other, the physical signs are sometimes such as to suggest the existence of a large cavity with rigid walls; but a careful and often repeated study of those signs will prove that they vary with the amount and time of the expectoration, and that sometimes the signs of a cavity are often wanting, and that at other times they are present only in isolated parts. In the eighth place, in opposition to Traube and others, I contend that the sputum in bronchiectasis, similar in characters to that of advanced and regressive fibroid, frequently contains fragments of elastic tissue in two forms: first, in the form of bands, consisting of fibres running in straight lines parallel to each other; and, secondly, in the form of elastic areolæ and thickened intersecting trabeculæ. The former are exfoliated from the bronchial mucosa; the latter come from the pulmonary alveoli disintegrated by ulceration proceeding outwards from the bronchial dilatations. In the ninth place, the sputum in uncomplicated cases of bronchiectasis, accompanied or unaccompanied by fibroid indurations and excavations, does not, as far as my present experience extends, contain tubercular bacilli. In the tenth place, the only certain means of distinguishing a tubercular from a bronchiectatic cavity, or of knowing when a tubercular has supervened upon a fibroid or bronchiectatic process, is the presence in the sputum of tubercular bacilli.

Leaving now the bronchietatic lung state, I proceed to consider the chief points in the clinical history of the phthisical fibroid lung. As before, I will discuss, first, the local and physical signs, and thereafter, the constitutional or general symptoms. The physical signs of the phthisical fibroid lung are the same as those of the simple fibroid lung, with certain alterations and additions. The disease is for the most part unilateral; and when we inspect the chest, we observe the same flattening or retraction of the affected side, the same depression of the shoulder and nipple, the same leaning of the body to the affected side, the same approximation of the ribs and hollowing of the intercostal spaces, the same displacement of the cardiac impulse and throbbing at the root of the pulmonary artery,[4] the same projection of the lower angle of the scapula and twisting

[4] This throbbing at the root of the pulmonary artery is sometimes mistaken for the systolic impulse of the left auricle.

of the spine, the same restricted movements of inspiration, and the same rounded fulness and compensatory expansion of the unaffected side. By palpation and percussion we elicit results resembling those elicited by examination of the fibroid lung: diminution in varying degrees of tactile vocal fremitus, sometimes friction fremitus, and dulness on percussion, seldom over the upper, usually over the lower lobes, and most frequently at the posterior base. Upon auscultation we hear over the summit a harsh and jerking respiratory murmur, prolonged expiration, perhaps some medium crepitation or dry rhonchus, and increased vocal resonance. Over the dull regions there will be heard feeble breath sounds, coarse crepitations, and bubbling rhonchi, usually metallic in character; at some parts the vocal resonance will be diminished, and at others increased. At one or two spots in the base or middle of the lung, very rarely at its summit, there will be found a tubular percussion note, increased fremitus, cavernous breathing, bubbling or smaller gurgling râles, and piercing bronchophonic voice resonance. Throughout the lung opposite the affected one the respiratory murmur, penetrating everywhere, will be found loud, harsh, and accompanied by a few rhonchi or by scattered moist crepitations, which come and go. The patient has paroxysms of cough, making the face swollen and livid, and ending sometimes in dry retching, sometimes in the expulsion of several ounces of expectoration. This expectoration, sometimes gelatinous or muco-purulent, sometimes in discrete opaque masses like softened cheese, sometimes watery, sanguinolent, or fetid, contains in a mucoid or granular matrix pus-globules, granule-cells, blood-discs, epithelial cells, bands and areolæ of elastic tissue, and the débris of decaying structures swarming with micrococci. The breathing, quiet when at rest, becomes, on moving about or on coughing, shallow, laboured, and quick. The heart, drawn to the affected side, may be acting vigorously and with moderate frequency; there will be probably a systolic bruit in the pulmonary area; the pulse will be of moderate volume, and the superficial cervical veins will be distended. If the disease is much advanced, the face and neck will be swollen, and the integument over the side of the affected lung may become œdematous; the pulse will increase in frequency and diminish in volume, and the extremities will become cold and damp. The digestive organs are more or less deranged through hepatic and gastro-enteric catarrh; the liver is enlarged, there are often hæmorrhoids, and the bowels are confined. Almost invariably the urine falls in density and contains albumen; and this condition of the renal secretion is one of the features which, with others to be mentioned, make so striking the difference between fibroid and tubercular phthisis. The patient is often fairly nourished, sometimes corpulent, and, unless there is much bronchiectatic disease, seldom thin. In a few cases he becomes cachectic-looking and anasarcous. The nervous system, except towards the close of the disease, is seldom seriously disturbed. Only one symptom occurs sufficiently often to be regarded as characteristic; this is pain about the base of the affected lung. Present in many cases, sometimes slight, sometimes severe, occasionally occurring in paroxysms which play around the attachments of the diaphragm and pass downwards into the abdominal walls, this pain, regarded as a neuralgia, is considered by the patient to be the essential part of his malady, and causes him, in fact, his chief if not sole complaint.

With such serious signs of disease, and with such an assemblage of symptoms depending thereon, it might well be thought that the patient was in constant suffering and in imminent peril; and yet, strange to say, it is sometimes quite otherwise. The symptoms which seem the most distressing cause him either little suffering or suffering which is immediately forgotten; and soon after a paroxysm of coughing, in which death from mechanical violence or suffocation or exhaustion seems inevitable, the patient may be found full of business, sparkling with humour, and confident of life. Here is another of those features of fibroid which serve to distinguish it from tubercular phthisis: the frequent concurrence of extensive disease with an abounding vivacity and abiding life. For although often it seems as if the patient must succumb, yet as often he rallies, and, renewing his conflicts and repeating his victories, he continues in the fervour of self-reliant hope to live and fight and to enjoy work.

Here, then, is the eventual outcome of a primitive dry pleurisy, which, after lasting for an uncertain time, has invaded the lung, altered or destroyed some of its structural constituents, consolidated portions of its parenchyma, and brought about ulcerous excavations therein. Here are well-defined pathological, corresponding with well-defined clinical, conditions moving forward together with constantly re-adjusted relations towards a definite issue. Here are an assemblange and progression of symptoms associated with or dependent upon an ulcerative destruction of more or less circumscribed non-malignant deposits in the lung. What is the name whereby we make known to each other the existence of this complex state? We call it pulmonary phthisis, and the term has so penetrated every department of thought and work in medicine that it can no more be rooted out. This final outcome of pulmonary fibroid invasion is therefore a pulmonary phthisis. And if nothing more could be said, here at last would be an end of the whole matter. But, for my own part, I believe that on this subject there is more to be said; and to those who have sufficient experience and settled convictions I regard it as a duty to say it. Such saying may clash with established opinion, assume the aspect of a retrograde movement, and be even inaccurate. Nevertheless, it ought to be welcomed; for genuine thought born of genuine work must always in science have its place and use. What, then, if under the term pulmonary phthisis there are included several states, which, although corresponding to the generic definition, are different in their characters, course, duration, and issues? If they exist, ought not such states to be named, and so named that the ideas which they express, and the distinctions which they embody, shall be preserved for future study and use? It cannot be a worthless knowledge which will enable one in a given case to predict with accuracy its future course, and say whether the subject of it is to live for five or for fifty years. And, furthermore, if such states have vindicated their right to be named, upon what principles shall the names be bestowed? Surely, if we wish to avoid confusion of thought and speech, surely if we wish to repress that needless ever-changing nomenclature, that substitution of words for ideas, that reproduction of old thoughts disguised under freshly furbished raiment, which in knowledge so often begets movement without progress, we shall make sure that the name given shall be based on some physical characteristic of the thing named; so that whilst theories of its nature may change, the name bestowed upon it, and by which it becomes everywhere and by everyone understood, shall remain unchanged.

Now, my contention is that our answers to all these questions should be in the affirmative. I contend that there is a general assemblage of pathological conditions upon which we may bestow the generic term phthisis; that included in this term are subsidiary groups of states, which, differing each from the other in some essential points of their pathological and clinical history, demand separate recognition; and that, in naming them, we should have exclusive regard not to the ephemeral theories of their nature, but to the abiding facts of their physical constitution. Guided by these considerations, I regard the ultimate condition of the lung invaded, altered, consolidated, and excavated by fibroid material as a phthisis; and seeing that the most obvious and unvarying fact in its physical constitution is the presence and action of this very fibroid substance, I am bold enough to call it fibroid phthisis. This boldness will doubtless call down upon me a storm of reprobation and denial; be it so. Confident that there is at least some just foundation for the position which I have taken, I must be content to endure and wait. In reply to this contention it will be said that the subject is no longer open to discussion; that experimental, pathological, and clinical inquiries concur to prove that there is but one phthisis, the sole originator of which is the tubercular bacillus; that there is neither room nor need for subsidiary classifications; and that their advocacy can be accounted for only by the ignorance or incompetence of the advocates. But these arguments, couched in such courtesies of modern controversy, are not so conclusive as they sound and seem. Many answers may be made to them, but on the present occasion I shall confine myself to two, which, as I venture to think, are neither light nor irrelevant.

In the first place, assuming the absolute unity of phthisis under the exclusive causation of the tubercular bacillus, this unity does not do away with the fact that there are included in it subsidiary groups which, for reasons already given and not refuted by the bacillary presence, require separate and permanent recognition. At present the bacillary hypothesis, although supreme in the domain of pathology, continues to be of but small account or even barren in the field of practical medicine. We

cannot prevent the entrance of the bacillus into the organism; we cannot follow it into the secret places where it dwells and works; we cannot reach it by drugs, nor put an end to its multiplication by taking refuge among the mountain tops. But although we cannot eradicate the bacillus nor arrest its action upon the organism, we may perhaps succeed in helping the tissues to resist more or less successfully the attacks which it makes upon them and the destruction which follows in their wake. And, although in addressing ourselves to the furtherance of this object, we must have regard in the first place to the general well-being of the organism, we must not be unmindful of the different structural effects which arise from the unitary action of the bacillus. We must remember that sometimes these structural effects appear under the form of tubercles, sometimes under the form of caseous masses, sometimes under the form of fibroid consolidations, and sometimes as combinations of these forms, in which, however, one form is always predominant. Now, it can scarcely be denied that there is some difference of meaning in these differences of structural effects; that they pursue different courses; and that they react in different ways to the influences of climate, food, alcohol, and drugs. And if this be so, I can discover no valid reason why those different groups should not be recognised by distinctive names, nor can I understand how we are to preserve a complete loyalty to the uses of knowledge if we continue to refuse them recognition. It can be no invasion of the rights and privileges of the bacillary suzerainty to grant subordinate autonomies to the several groups of states which, arising under its influence and continuing through its presence, pursue independent courses and create widely different histories. Why under the generic name bacillary phthisis should we not recognise the subordinate independence of tubercular bacillary phthisis, caseous bacillary phthisis, and fibroid bacillary phthisis? Surely every just differentiation is a substantial gain, and every confounding of things fructively distinct a material loss. In the second place, I hold that the assertion that all ulcerations of non-malignant deposits in the lungs are bacillary remains unproved, and is opposed to the results of inquiries made by several competent observers. I contend, on the contrary, that there exist cases of ulcerative bronchiectasis and of fibroid lung with excavations in which, after repeated search by processes successful in veritable tuberculosis, no tubercular bacilli could be found. It is to such cases that I give the name of non-bacillary fibroid phthisis.

It may now be justly asked, Would anything be gained by establishing this distinction? I think much in many ways. It is, however, of the clinical gain alone that I shall at present speak. By adopting and carefully studying the proposed distinction, we should learn that the history of non-bacillary fibroid phthisis is quite different from that of bacillary tubercular phthisis, and that the treatment which would prove useful in the one might prove both useless and injurious in the other; for example, alcohol which is usually helpful in caseous, is usually hurtful in fibroid phthisis. If anyone will critically compare the broad facts making up the history of tubercular with those making up that of fibroid phthisis, I think he will become disposed to admit that the distinction now contended for is both real and considerable.

Let me bring to your remembrance a very few of the contrasting facts which are found in the two forms of phthisis now under consideration.[5] Tubercular phthisis is primarily of constitutional origin, and appears for the most part in the young; it is bilateral; its course is accompanied by elevation of temperature and rapidity of circulation, by progressive loss of flesh, strength, and colour, sometimes by laryngeal ulceration, and sometimes by sensations of painful exhaustion and malaise; it is usually rapid in its progress; the majority die within three years; and the few who, in consequence of fibroid complications, live for several years, enlarge the average duration of the disease to four or five. On the other hand, fibroid phthisis is usually of local origin, and appears for the most part in the middle-aged; it is in the main unilateral; it is unaccompanied by elevation of temperature or hurry of circulation; flesh, colour, and strength may remain but slightly affected for years; it is not incompatible with great bodily and mental energy; the urine almost always contains a little albumen; the progress of the malady is slow; œdema is never absent throughout; and death, which seldom occurs within five years, often lasts for thirty.

Here I must bring these lectures to an end. Acutely sensible of their shortcomings, I regret that they have not been worthier of the occasion, of the place, and of you. Nevertheless, I take courage of heart in the thought that those who have worked the most, and thought the deepest, and can judge the best will not be ready to forget, or to despise when remembered, the small but sometimes perfect uses of imperfect work.

[5] That is, there exist in the organism certain peculiarities of soil which enable the bacilli to grow and multiply.

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ON THE

# THERAPEUTIC VALUE OF ARSENIC IN ANÆMIA AND ATROPHIC CONDITIONS.

BY SAMUEL WILKS, M.D., LL.D., F.R.S.

ALTHOUGH the value of arsenic in many diseases is well known, yet I believe the extent of its efficiency has by no means spread through the profession at large, judging from the frequent scepticism one meets with when its use is suggested. I should therefore wish, as briefly as possible, to state my experience of the great value of this most remarkable remedy during many years of practice. It has been best known as a medicine in skin diseases, but this only of late years, for Addison, who followed directly in the school of Willan and Bateman, rarely ordered it. Next to its use in cutaneous affections has been its administration in neuralgic affections and ague; after that in special cases of various kinds. More recently the great value of arsenic has been recognised in anæmia; but it is not widely known, I believe, as being equally efficacious in various forms of cachexia, of which I am about to speak.

When a remedy acts—to adopt the expression of the older schools—as an alterative, by modifying nutrition in some unknown way, a question arises which is quite open to consideration: whether those diseases which succumb to its action may not depend upon the same cause; whether, indeed, they are not bound together by some common origin. Be this as it may, there can be no doubt that many of the cutaneous affections cured by arsenic have a gouty origin, and therefore it is not surprising that the same remedy has a great power in preventing attacks of gout. This I have known for many years, and in some cases have by its use undoubtedly kept the attacks in abeyance. Then, this gouty class of persons are often neuralgic, and it may be in them especially that arsenic is the best nervine remedy. I have certainly found it amongst the most efficacious medicines, and in some cases the only remedy. Thus, before the introduction of nitrite of amyl and glonoin for angina pectoris I relied mainly on arsenic, and in some cases kept off attacks for weeks when they had previously occurred almost daily; but this is by no means a novel treatment, for a reference to THE LANCET of May 26th, 1832, will show a letter setting forth the virtues of arsenic in this complaint. In some forms of nervous affection I have found it quite unique in its action. For example, a lady for many years has been the subject of ciliary neuralgia—that is, she has attacks of violent pain in the eyeball accompanied by intense congestion and lacrymation. No ophthalmic surgeon to whom she has applied has afforded her the slightest relief either by medicines or local applications. The only respite she has from her sufferings is during the time she is taking arsenic. How I became acquainted with the use of this remedy in asthma from one of my out-patients I described many years ago.

But the most remarkable effects of this remedy are seen in anæmia and various forms of cachexia and atrophy. My attention was first markedly drawn to it in this connexion owing to the controversy which took place between my late colleague, Dr. Alfred Taylor, and others in reference to the statement published in Johnston's "Chemistry of Common Life" in the year 1855 about the arsenic-eaters in Styria. Young girls were said to add to their charms by using it, acquiring blooming complexions, full rounded forms, and a healthy appearance. Soon afterwards I began to use arsenic in chlorosis with much benefit, but it was not until about ten years afterwards that I had some striking examples of its good effects. If I remember right Dr. Sutton

of the London Hospital was then using it in the same class of diseases. The case I especially recollect was a lady about forty years of age, who was pronounced by myself and other physicians to be the subject of idiopathic anæmia, the form of disease subsequently discovered by a German, and styled "pernicious anæmia." Her bloodless and feeble condition compelled her to keep her bed, and it was never believed that she would rise from it again. I suggested arsenic as a possible useful remedy, and she began soon to improve, and in a few weeks was able to come to my house. I saw her some years afterwards, in 1874, when she was quite well. The case is more especially impressed upon my memory on account of the remarks of the husband. When I told him of the remedy which had cured his wife he expressed no surprise, saying it was just the medicine he should have thought of, for if he had a horse which was not "thrifty" he gave it arsenic, rendering it again plump and its skin glossy. Subsequent to this case I have had several of a similar kind, my last one being only a few weeks ago. It was that of a gentleman living at Holloway, and whom I saw with Dr. Blackstone. He had gradually grown anæmic and breathless, so as to be unable to leave his house, and he walked with much difficulty. I called it one of idiopathic anæmia, and feared that he would never recover. He took five drops of liquor arsenicalis, and in a month he was comparatively well. In most of the cases where arsenic has succeeded, iron had previously failed; and it is a question, therefore, whether the latter be of any use in the so-called pernicious anæmia. This, however, does not seem invariably the case unless the diagnosis is at fault. For example, a woman came into the hospital in so bloodless a state that she could not leave her bed, and it was said that iron had been given in vain. An examination of the blood displayed, as was thought, characteristically altered blood-globules, and arsenic was prescribed. After a long course of this medicine she was no better, when iron was ordered for her. She then immediately improved, and left the hospital well.

I remember two cases of anæmia with some discolouration of the skin, suggesting the existence of Addison's disease, and which were cured by arsenic. One was a lady whom I saw as long ago as 1869, who had gradually been getting thin, sallow, and bloodless. She was first thought to have liver disease, and then Addison's disease; but of these there was no evidence, and I recommended arsenic. She speedily recovered. The other case was that of a lad who was sent to me from Suffolk by Dr. Manthorp as he was supposed to be the subject of Addison's disease. He was anæmic, sallow, very feeble, and breathless on exertion. Arsenic was given him, and he completely recovered.

It is another class of case, however, which especially prompted me to take up my pen and extol the virtues of arsenic, for although its efficacy is known in anæmia, I do not find that a knowledge of its merits has extended to wasting and general cachexia. It was in the year 1868 that I went to see a lady who was confined to her bed and in an extreme state of emaciation. I found on physical examination nothing tangible except an enlarged spleen. She had been staying at a friend's house in a doubtfully malarious district, and therefore might have been infected by ague poison. Arsenic was given, and she made a rapid and complete recovery. It is well known that in cases of inveterate malarious poisoning arsenic is often the best remedy, but the possible existence of such a cause will not account for the marvellous effects of arsenic in other cases; and I have notes of two patients who lived at Margate, where a miasmatic influence could not be suspected. The first case was that of a lady sent to me by Dr. Thornton. She was much impoverished, and at the same time had loss of appetite and other gastric symptoms, so that I suspected early malignant disease. I could not, however, prove this, and suggested a trial of arsenic. The result is seen in a letter which I received from Dr. Thornton, dated December 1875, in which he says, "I fancy you will be pleased to know that Mrs. B——, for whom you prescribed arsenic, and of whom you took not the most sanguine view, thinking probably that some hidden malignant disease might develop itself, strange to say, is now convalescent—that is, she has recovered her natural complexion, lost all pains and feeling of debility, and, indeed, is as well as she has been for the last few years. I never saw a more unpromising case, and I do not remember ever to have seen anyone improve so steadily as she did under the influence of arsenic (?); at all events, she was very ill, and now she is comparatively well."

The second case from Margate was that of a young man resident in that town, and brought to me by Mr. Dunstan of Tollington-park. He was twenty-one years of age, and had been gradually wasting away for many months until he had become, as his friends said, a perfect skeleton. He certainly was emaciated to a most extreme degree. On examination I failed, like other medical men, to discover any disease, but saying that if the patient had been an infant he would have been called the subject of marasmus. I suggested arsenic as the only likely remedy to do him good if he had no organic disease, and four drops of the solution were prescribed three times a day. He immediately began to recover; in two weeks he had gained five pounds, and in a few more weeks he was perfectly well.

Another case where the remedy was of great service was that of the Rev. Mr. S——. He had been acting as curate both in London and Brighton, but, his health gradually failing, he was obliged to give up his duties. No medical advice was of any value to him, and he was recommended to take a voyage to Australia. He, however, grew worse and worse, and on his arrival at Melbourne he was sent into the hospital. After a while he was again placed on board ship, under the care of a medical man, and sent home to Hampstead. He was carried into the house, being far too weak to walk, and when I saw him I found him as wasted as any living man could be. He was lying on a couch too feeble to rise, and very little more than a skeleton. His weight on leaving the ship was 5 st. 7 lb. With the exception of a cardiac bruit I found no disease, and as he had had every kind of medicine, and every variety of essences of meats and other foods, there seemed little for me to do; but I prescribed arsenic. He slowly began to improve, and in a few weeks he was able to leave his home and visit me. He walked feebly, but his limbs had increased in size, and he weighed 7 st. 10 lb. He then left for the country and the Continent.

I have now mentioned a sufficient number of cases to show the value of an old remedy, and certainly one of the most remarkable in the Pharmacopœia. I would not have it supposed that it cures all cases of anæmia and atrophy, or that it has never failed in my hands; for if I collected all the cases in which I have given it and noted the result, it is probable that the failures might equal the successes. But an explanation will show that a statistical method of arriving at the truth is of no value, seeing that the cases where the remedy was administered were not of a like kind, and that the unsuccessful cases, although resembling in outward appearance those of simple anæmia and atrophy, were in the majority of instances examples of early malignant and other organic disease. The only cases which can be rightly compared are those of a like kind, but the question of its comparative value under the circumstances named cannot affect in any way the undoubted fact of its curing numerous cases of apparently fatal disease. No question can arise as to the efficacy of a medicine when it is prescribed for a person who is weekly and monthly declining in health, and who as rapidly, or more rapidly, regains his health and strength under its use. When this has been observed in a large number of instances, the proof of its value is complete. I have never given very large doses, generally four or five drops of the liquor arsenicalis three times a day, or a little more of the soda preparation. I have never observed any injurious effects from its long use, although, as is known, it becomes absorbed into the system, the urine showing its presence many weeks after its administration has ceased. I will not pretend to say how the remedy acts. Why, when wasting is going on and the blood-corpuscles becoming disintegrated, arsenic should stop the process, and the globules begin to grow, or why it should allow the carbon to be stored up as fat, I do not know. I lay the clinical facts before my readers, and hope that those to whom they are not altogether new will excuse my doing so in the wish to make their knowledge and mine more extended and useful.

Grosvenor-street, W.

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BEQUESTS.—The late Miss Duthies of Ruthvieston has, we understand, bequeathed the following among other legacies to public institutions in Aberdeen:—The Royal Infirmary, £2000; the Aberdeen University, for two medical scholarships, £2000; the Hospital for Incurables, £500; the Lying-in Institution, £500; the General Dispensary, £500; the Hospital for Sick Children, £500.

## ON A CASE OF OBTURATOR HERNIA.

BY RICKMAN JOHN GODLEE, M.S.,
ASSISTANT SURGEON TO UNIVERSITY COLLEGE HOSPITAL.

CASES of obturator hernia are so uncommon and present such difficulties of diagnosis and treatment, that it may be well to place the following one on record, although strangulation had been in existence for so long that there was little hope of any treatment giving relief, and that adopted did not save the patient.

E. F——, a woman aged forty-five, was admitted under my care into University College Hospital on May 29th, 1884, at 8 P.M. with symptoms of intestinal obstruction. We were unable to obtain any good previous history of the case, and the notes do not mention the length of time from which she had been suffering from symptoms of complete obstruction; but they had been in existence for several days, I think about five, and she had for some time been bringing up fæcal vomit. She was on admission in a state of great collapse, with small pulse, cold extremities, and a marked blue colour of the skin. She complained principally of pain about the region of the umbilicus, or rather above it, and it was only on carefully examining all the hernia regions that it was found that there was distinct tenderness and slight fulness in the left Scarpa's triangle. On questioning her about this point, she allowed that for a long time past she had been subject to pain in this part, which extended down the front of the thigh and which was subject to variations, and was relieved by lying down; but it was evident that occasionally it had caused her considerable inconvenience. The diagnosis apparently lay between some twist or internal strangulation and an obturator hernia (though the possibility of the obstruction depending upon the presence of a tumour was not lost sight of,) and, considering that the former was not improbable, and that if it were the latter it could probably be safely dealt with by abdominal section, I proceeded to operate at 9 P.M. An incision about four inches long was made between the umbilicus and the pubes through the abdominal wall, and a piece of great omentum which lay beneath the incision and which was much matted together was first drawn out of the wound. The index finger of the left hand has then at once passed down to the obturator foramen, and there was no difficulty in detecting the fact that a portion of bowel was tightly strangulated in the upper part of the obturator foramen. It was quite impossible without employing undue force to draw this back, so a blunt-pointed bistoury was carefully passed down along the finger and by directing the edge inwards the constricting ring was divided and the gut was reduced. The division of the stricture at such a depth from the surface and with the coils of ntestine surrou nd ing the finger was a matter of some difficulty, but when it was accomplished the gut was drawn up with ease. It proved to be a part of the small intestine, about two inches long; it was of a bluish colour, but rapidly became red under observation. It was also seen that the previous traction had caused two slight rents in the peritoneal coat, which passed obliquely across the gut, the edges of which were accordingly drawn together with continuous sutures of very fine catgut. The lacerations bled readily. The portion of protruded omentum was then ligatured in two places and removed, the stump being returned, and the abdominal incision was approximated. The patient did not rally after the operation, though she took nourishment, including a good supply of brandy, well. The vomiting stopped, but her extremities remained cold and became more blue, and her skin was bathed in a cold perspiration. Towards the afternoon of the following day an excited delirium set in, and in the evening she died.

The autopsy revealed the fact that the portion of gut which had been constricted was about eighteen feet from the pylorus, and that its mucous membrane was dark and opaque from extravasated blood. There was slight peritonitis around the piece of gut which had been included in the hernia, the coils in this region being adherent to one another and to the pelvic wall by recent lymph. There was also a little reddish fluid in the peritoneal cavity. The hernial sac was of small size, and lay immediately beneath the pectineus muscle. Beyond considerable hypostatic congestion of the lungs, nothing else worthy of note was learnt from the post-mortem examination.

I do not wish to bring this case forward in order to advocate the method of treating obturator hernia by abdominal section in preference to the operation in Scarpa's triangle, though it is probable that the latter is a more difficult procedure. The abdominal section is not an altogether simple matter, and it no doubt involves certain risks which are not encountered in the other operation. It was selected in this case because the symptoms, while obvious enough to direct attention especially to the obturator region, were not thought to be clear enough to negative the possibility of the mischief being found in the locality to which the greater part of the pain had been constantly referred; and it was argued that if the latter had been the case, an abdominal section following the necessarily tedious operation in the thigh would have been a very serious matter in the exhausted condition of the patient. An important lesson to be learnt from the case is the extreme care which should be exercised in making traction on the intestine in a patient whose tissues, as they were in this case, are all in a very flabby and easily lacerable condition.

Wimpole-street, W.

## WHAT IS THE EXPLANATION OF ACQUIRED IMMUNITY FROM INFECTIOUS DISEASES?

BY GEORGE M. STERNBERG, M.D.,
MAJOR AND SURGEON, U.S.A.

IT is well known that in the specific infectious diseases of man and of the lower animals a single attack commonly confers immunity from subsequent attacks. There are, however, numerous exceptions to this rule, and the immunity conferred is not absolute, but has a variable value, which depends partly upon individual susceptibility, partly upon the physical vigour of the individual when subsequently exposed, and partly upon circumstances relating to the nature of the exposure—e.g., concentration of poison, mode of infection, &c. There is also evidence that in some cases at least the time which has elapsed since a first attack is an important factor in determining immunity when a subsequent exposure occurs. Even in small-pox and in yellow fever, diseases in which a single attack is in most cases protective during the lifetime of the individual, fatal second attacks occasionally occur. Nevertheless the general law of immunity as a result of a single attack is well established for a majority of the acute infectious diseases.

It is evident that the immunity which results from inoculation with an "attenuated virus"—as, for example, in Pasteur's protective inoculations against anthrax, or from vaccination—is of the same nature, and that a satisfactory explanation must include all established facts of this class. Upon taking a broad view of the question, it will be seen that it includes also the facts relating to relative race immunity, such, for example, as the comparative mildness of yellow fever in the negro, the alleged liability of the esquimaux to suffer a fatal attack of small-pox as a result of vaccination (Grawitz), the immunity of Algerian sheep from anthrax, &c.

Naturally this question has attracted the attention of the leading investigators in the field of experimental pathology, for its inherent interest and practical importance are apparent. Three explanations have been offered to account for the phenomena in question, which may be stated as follows:—(1) The "exhaustion theory," advocated by Pasteur, which supposes that some substance present in the body of a susceptible individual up to the time of a first attack, and which is essential for the development of the specific germ of the disease, is exhausted during the attack, and that consequently this particular germ is unable subsequently to multiply in the body of this individual. (2) The "antidote theory" advocated by Klebs and recently supported by Klein.[1] This theory supposes that some chemical substance is produced during the attack which is inimical to the development of the germ, and which, remaining in the body of the animal, prevents its subsequent development. (3) The vital resistance theory, which supposes that immunity is due to an acquired tolerance on the part of the living cellular

[1] Micro-organisms and Disease, Practitioner (London), vol. xxxiii, No. 4, p. 249.

elements of the body to the poisonous products evolved by disease germs, to which they probably owe their pathogenic power, and a consequent ability to resist invasion by them. According to this view individual and race differences in susceptibility, as well as the more or less perfect immunity resulting from a single attack of any one of the specific infectious diseases, are phenomena depending upon differences in vital resisting power, either inherited or acquired. The last-mentioned theory is referred to by Klein in his recent work on "Micro-organisms and Disease" in the following language:—"Some observers (Grawitz, &c.) are not satisfied with this theory" [the antidote theory], but assume that, owing to the first attack, the cells of the tissues so change their nature that they become capable of resisting the immigration of a new generation of the same organism. There is absolutely nothing that I know of in favour of such a theory; it is impossible to imagine that the cells of the connective tissues, of the blood, and of other organs, owing to a past attack of scarlatina, become possessed of new functions or of some new power—as, for instance, a greater power of oxidising, or the like."

As the present writer is perhaps included in the "&c." ("Grawitz, &c.") of the above quotation, he feels called upon to say something in favour of the theory thus summarily disposed of, which seems to him to be the only one thus far offered which is at all tenable, and which he advocated in an article published in the *American Journal of the Medical Sciences* of April 1st, 1881, which has the precedence over the paper by Grawitz by a few days, the latter having appeared in Virchow's *Archiv* on the 8th of the same month. In order that the two explanations which I reject as untenable may be fairly presented to the readers of the present paper, I shall quote verbatim the arguments advanced in their support by their most prominent advocates.

The first hypothesis (1) is supported by Pasteur in the following language:—"It is the life of a parasite in the interior of the body which produces the malady commonly called 'choléra des poules,' and which causes death. From the moment when this culture (i.e., the multiplication of the parasite) is no longer possible in the fowl, the sickness cannot appear. The fowls are then in the constitutional state of fowls not subject to be attacked by the disease. These last are as if vaccinated from birth for this malady, because the fœtal evolution has not introduced into their bodies the material necessary to support the life of the microbe; or these nutritive materials have disappeared at an early age. Certainly one should not be surprised that there may be constitutions sometimes susceptible and sometimes rebellious to inoculation—that is to say, to the cultivation of a certain virus, when, as I have announced in my first note, one sees a preparation of beer yeast made exactly like one from the muscles of fowls (bouillon) to show itself absolutely unsuited for the cultivation of the parasite of fowl cholera, while it is admirably adapted to the cultivation of a multitude of microscopic species, notably to the bactéride charbonneuse (bacillus anthracis). The explanation to which these facts conduct us, as well of the constitutional resistance of some individuals, as of the immunity produced by protective inoculations, is only natural when we consider that every culture in general modifies the medium in which it is effected; a modification of the soil when it relates to ordinary plants; a modification of plants and animals when it relates to their parasites; a modification of our culture liquids when it relates to 'mucédines,' 'vibrioniens,' or ferments. These modifications are manifested and characterised by the circumstance that new cultivations of the same species in these media become promptly difficult or impossible. If we sow chicken bouillon with the microbe of fowl cholera, and, after three or four days, filter the liquid in order to remove all trace of the microbe, and subsequently sow anew in the filtered liquid this parasite, it will be found quite powerless to resume the most feeble development. The liquid, which is perfectly limpid after being filtered, retains its limpidity indefinitely. How can we fail to believe that by cultivation in the fowl of the attenuated virus we place its body in the state of this filtered liquid, which can no longer cultivate the microbe? The comparison can be pushed still further; for, if we filter the bouillon containing the microbe in full development, not on the fourth day of culture, but on the second, the filtered liquid will still be able to support the development of the microbe, although with less energy than at the outset. We comprehend, then, that after a cultivation of the modified (*atténué*) microbe in the body of the fowl, we may not have removed from all parts of the body the aliment of the microbe. That which remains will permit a new culture, but in a more restricted measure. This is the effect of a first inoculation; subsequent inoculations will remove progressively all the material necessary for the development of the parasite."[3] In commenting upon Pasteur's explanation of acquired immunity in the chapter on "Bacteria in Infectious Diseases" in my recent work I remark:[3] "It is a little surprising that after disproving by the experimental method the hypothesis last mentioned"—viz., the antidote theory adopted by Klein—"which had been proposed by a member of the French Academy in explanation of the phenomenon in question, Pasteur did not, in accordance with his usual custom, attempt to establish his own hypothesis upon a firm foundation by an experiment which at once suggests itself. If a fowl which is protected against cholera, or an animal which is protected against anthrax, owes this protection to the fact that a certain material which is required for the development of the microbe of fowl cholera, or for the anthrax bacillus, has been exhausted in the course of the modified form of the disease to which immunity is due, then the flesh of such an animal made into bouillon should not constitute a proper culture medium for the organisms in question. The writer ventures to predict that the result of such an experiment would not be favourable to Pasteur's hypothesis, and that it will be found that the micrococcus of fowl cholera can be cultivated in bouillon made from the flesh of a protected animal, and that the bacillus of anthrax may multiply freely in the blood, or in an infusion of the flesh, of an animal which, before it was killed for the experiment, possessed immunity against the disease anthrax."[4]

Since the above was written, Salmon in the United States and Klein in England have reported the results of experiments which show that the prediction made was well founded.

Salmon says, in a recent communication to *Science*:[5]—"I trust, however, you will pardon me for calling your attention to the fact that more than two years ago I demonstrated that immunity was only relative, never absolute; that the most susceptible individual possessed a certain degree of immunity which can be accurately measured; and that all degrees of immunity may be overcome by a sufficient increase in the dose of virus. The immunity of the animal body, then, in no sense resembles the exhausted cultivation liquid in the flasks of Pasteur and Tyndall, which no increase in the amount of virulent material added can ever induce to support the development of new generations of the microbe, and the honour of demonstrating this radical difference is due to American investigations. I went further than this, however, and showed that this theory of our European friends was absolutely untenable, because broth made with distilled water from the flesh of an animal that had been granted a very complete immunity was just as favourable a medium for the growth of the virus as that made from susceptible animals; and that such virus lost nothing in virulence by being grown in such a medium. I will not trouble you with the theory of immunity which I developed from these experiments. Like other American work, it may have no value; but it may interest you to know that an able German writer, in the last number of Virchow's *Archiv*, has propounded a theory which in its most important points is identical with my own."

In referring to this theory as his own, Salmon seems to have overlooked the fact that I offered the same explanation of acquired immunity in my paper, already referred to, which was published in the *American Journal of the Medical Sciences* for April, 1881.

Klein says, with reference to the exhaustion theory:—"On careful analysis it will be found that it is not capable of explaining the facts of the case. As we mentioned in a former chapter, cattle inoculated with blood of a guinea-pig dead of anthrax become affected with anthrax, which, although not fatal, is nevertheless sometimes very severe. The animal recovers, and is now, for a time at least, secure against a second attack. But there is absolutely no ground for the assumption that if an infusion of the tissues of this animal were made the bacillus anthracis sown in it would not thrive luxuriantly, seeing that bacillus anthracis grows upon almost anything that has a trace of proteids. Similarly, when of the tissues of a guinea-pig, or mouse, or rabbit, dead of

[3] Comptes Rendus, Acad. des Sciences, xc., p. 952.
[3] Bacteria; Wm. Wood & Co., New York, 1884.
[4] Op. cit., p. 243. [5] Sept. 26th, 1884, p. 303.

anthrax, an infusion is made, and this is used as nourishing material for bacillus anthracis in artificial cultures, it is found that these latter thrive splendidly. There is then no reason whatever for assuming that, after one attack of illness the blood and tissues become an unfavourable soil for a second invasion of the same organism, and that this change is due to the exhaustion of some necessary chemical compound."[6]

In my own paper, heretofore referred to, in the absence of experimental data I argue as follows:—"Let us see where this hypothesis leads us. In the first place, we must have a material of small-pox, and a material of measles, and a material of scarlet fever, &c. Then we must admit that each of these different materials has been formed in the system and stored up for these emergencies,—attacks of the diseases in question,—for we can scarcely conceive that they were all packed away in the germ cell of the mother and the sperm cell of the father of each susceptible individual. If, then, these peculiar materials have been formed and stored up during the development of the individual, how are we to account for the fact that no new production takes place after an attack of any one of the diseases in question? Again, how shall we account for the fact that the amount of material which would nourish the small-pox germ to the extent of producing a case of confluent small-pox may be exhausted by the action of the attenuated virus (germ) introduced by vaccination? Pasteur's comparison of a fowl protected by inoculation with the microbe of fowl cholera with a culture fluid in which the growth of a particular organism has exhausted the pabulum necessary for the development of additional organisms of the same kind does not seem to me to be a just one, as in the latter case we have a limited supply of nutriment, while in the former we have new supplies constantly provided of the material (food) from which the whole body, including the hypothetical substance essential to the development of the disease germ, was built up prior to the attack. Besides this, we have a constant provision for the elimination of effete and useless products. "This hypothesis, then, requires the formation in the human body, and the retention up to a certain time, of a variety of materials, which, so far as we can see, serve no purpose except to nourish the germs of various specific diseases, and which, having served this purpose, are not again formed in the same system, subjected to similar external conditions, and supplied with the same kind of nutriment."

It hardly seems worth while to give further attention to this explanation offered by the great chemist to whom we owe so much, but who, if we may judge from his reasoning in this instance, is not equally great as a physiologist. We proceed, therefore, to consider hypothesis No. 2.

*(To be continued.)*

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REMARKS ON

# NINE CASES OF DEATH BY HANGING

(SIX EXECUTIONS AND THREE SUICIDES).

BY R. J. KINKEAD, M.D. DUB.,

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IT has been my lot to have rather an extensive experience in death by hanging, both by execution and suicide; although the scientific value of such experience has been largely reduced by the want of post-mortem examinations in all the cases save one, yet something may be learned from a report of them. In the case of executions the prison surgeon has no power to make a post-mortem unless ordered by the coroner. On sentence of death being passed, the prisoner is remitted to the local prison whence he came, and given into the custody of the governor. He remains in his custody, subject to the special rules for condemned prisoners, until the day fixed for execution. The death warrant is in the meantime issued to the sheriff, who has charge of everything connected with the execution. He it is who provides the gallows and engages the executioner, who acts as his officer. The sheriff is not bound to engage the public executioner; he can arrange with anyone he likes. In case no executioner can be found the sub-sheriff is bound to act as executioner, and in case he fails or refuses the high sheriff himself must discharge the duty. On the morning fixed for the execution the sub-sheriff comes to the prison, presents the death-warrant to the governor, and demands the body of the condemned, who is handed over to his custody, and by him to the executioner. Thus the condemned passes from the custody of the prison authorities entirely, and neither the governor nor any prison officer can interfere with him any more. They are, however, bound to assist the sheriff in the discharge of his duty; and by Act of Parliament the governor or deputy governor, the chaplain, and medical officer of the prison must be present at the execution, and make certain statutory declarations. But once the body of the criminal has been handed over to the sheriff, he passes completely from under the custody and control of the prison officials. It is necessary that this should be clearly understood, as there is a general impression to the contrary, and if, as sometimes happens, an accident occurs during an execution, the prison officers are supposed to be accountable, and to have an interest in hushing it up. It cannot be too clearly understood that they have nothing whatever to do with an execution beyond assisting the sheriff and acting as witnesses, and that the entire responsibility rests with the sheriff. Under this mistaken idea of the prison officers' duty it has been urged that the post-mortem examination on the body of an executed criminal should not be made by the prison surgeon, but that on independent medical man should be present at the execution, and give evidence at the inquest. I am not aware that there is any law which authorises a prison surgeon to make a post-mortem examination, on either an ordinary prisoner or executed criminal, without the requisite permission either of the relatives in the former case, or of the sheriff in the latter; and I am not certain whether the sheriff, although the legal custodian of the body, can give permission. He is debarred from the power, given to those in custody of a dead body by the Anatomy Act, of giving it for anatomical purposes. Consequently in cases of executions I have been unable to make a post-mortem examination, unless by order of the coroner. The body having passed to the custody of the sheriff I have felt I had no power as a prison officer to interfere with it. In the case of suicides, in addition to the difficulty likely to arise from the necessity of obtaining the permission of the relatives, the prison surgeon is prevented from making a post-mortem examination even at the coroner's bidding by an order from the executive; that in the case of any prisoner dying in prison, the post-mortem examination, if directed by the coroner to be held, shall not be made by the prison surgeon, but by an independent medical man, to be called in by the coroner for that purpose. This raises a question of law. In private practice, if an inquest is necessary, it is inexpedient that the medical attendant should make the post-mortem examination if any possibility of any question concerning the treatment could arise. In the case of a prisoner dying in prison an inquest must be held, and as the question of treatment, both medical and otherwise, necessarily arises, it is obviously expedient, unless the cause of death is very clear and the proof of good treatment convincing, that a post-mortem examination should be made, and that the duty should be discharged by "an independent medical authority." But as matters stand, the medical officer may be placed between the hammer and the anvil. The coroner is not under the authority of the executive. He is an independent judge, and can refuse to receive orders either from the Home Secretary in England or the Lord Lieutenant in Ireland. Suppose he orders the medical officer to make a post-mortem examination: if the surgeon obeys the coroner, he must disobey his superior officers; if he refuses to make the post-mortem examination, the coroner can commit him for contempt of court.

Shortly after the circular was first issued the coroner of the city of Dublin refused to recognise its authority, and directed the medical officer to make a post-mortem examination on the body of a criminal executed for murder. The Royal Commission on Prisons in Ireland has recommended that "governors be requested, whenever an inquest is about to be held, to inquire of the coroner whether a post-mortem examination is to be made, and, if he should reply in the affirmative, to inform him that" the Lord Lieutenant "wishes such examination to be made by a medical practitioner not connected with the prison service." This mode would certainly be an improvement; it would prevent the medical officer being placed in the very awkward predicament of having to choose which authority he should obey; and there are few coroners who would refuse to comply with a request

[6] The Practitioner, London, Oct. 1884, p. 247.

so conveyed. In only one case of the nine I have seen did the coroner deem a post-mortem necessary. Since January, 1880, there have been ten men executed, and three have committed suicide by hanging in Her Majesty's Prison at Galway. I have been present at the execution of six of these men, and saw the bodies of the suicides within a few minutes of their being discovered.

In eight of the executions Marwood was the hangman, and although he discharged his duty with celerity and death was instantaneous, yet it seemed to me that the time must have appeared terribly long to the criminal from the commencement of the preparations until the bolt was drawn. My observations have also convinced me that in no case should one executioner attempt to hang more than one person at a time; for not only is it likely that an accident may result—as actually did happen in one case—and the death of the criminal be prolonged, but the mental strain and agony of the miserable criminal waiting on the drop until the others are prepared must be something awful. To me, standing looking on, the time seemed interminable, although the work was done rapidly and did not occupy more than a minute or two. What must it have been to the unfortunate creature on the brink of eternity! This will be fully understood from a description of the process. The prisoner's arms are pinioned in the condemned cell. A belt is buckled round the waist; to this belt are attached two straps, which, when the belt is in its place, are about an inch or two in front of and above the anterior superior spine of the ilium. The arms are fastened to the side of the belt by these straps, so that the fingers can barely cross in front, and the elbows project somewhat behind. The pinioning being effected, the prisoner is marched to the scaffold and placed on the drop, immediately under the ring in the cross-beam, to which the rope is attached; the legs are then fastened together by means of a strap placed between the knees and the ankles. Next, the noose is placed round the neck, drawn firmly round the throat, and kept in position by a washer or ring. The white cap is then put on, and the executioner, stepping back, pulls the bolt. Now, it is evident that, no matter how dexterous and practised the executioner may be, the strapping the legs, adjusting the rope, and putting on the cap must take time; and if the prisoner is left standing while the same thing is being done to one or two others, his suffering must be very terrible. What it actually is I suppose no one can conceive; but in one case, although a single execution, and done very quickly, the man fainted, and was actually falling sideways when the bolt was drawn.

In Marwood's executions he used the long drop, and placed the knot under the chin. The rope hung down behind the prisoner's back from the ring in the cross-beam, and looped up from below the waist to its attachment under the chin. Thus it will be seen that the length of the drop was something more than the prisoner's height. This arrangement worked well if the prisoner was steady; but if restless, then there was the danger of what actually happened once—of the loop of the rope catching the convict's elbow as the body fell, and so preventing death being instantaneous. The first man I saw hung was executed in Jan. 1880. He was a tall, powerfully-built fellow, and met his death with great fortitude. One hour and a half after the execution, assisted by Dr. Pye, professor of anatomy, I made a post-mortem. Fæces had not been passed, but there had been an emission of seminal fluid. On dissecting the neck, we found most of the tissues torn through, the body of the third cervical vertebra was broken diagonally across and separated for at least two inches and a half to three inches from the remaining portion, the spinal cord was torn through, and in fact the head was retained in connexion with the trunk merely by the skin, which was not even abraded, a few muscular shreds, and the vessels on the right side. The trachea and œsophagus, the carotid artery and jugular vein on the left side, were torn through, and the tissues were emphysematous. On opening the thorax, nothing particularly abnormal was discovered in the lungs; they were slightly congested, but not to a very appreciable extent; the left heart was empty and firmly contracted, but on the right side both auricle and ventricle were full of frothy blood, the air escaping from the ruptured trachea having been evidently sucked down through the jugular vein.

The next execution I witnessed was in January, 1883. The prisoner walked with tolerable firmness to the scaffold, but appeared to faint on it, for just as the bolt was pulled he fell sideways towards the left; the drop too was evidently a very long one, as the loop of the rope was below the level of his knees. To ascertain roughly the lesions producing death did not need a post-mortem, as all the tissues, save about from one and a quarter to two inches of skin on the right side of the neck, were entirely severed. In fact, had it not been for that small portion of skin he would have been completely decapitated. I attribute this result to an excessively long drop, to a thin neck, and to a rotary motion being imparted by the man's fainting, so that the pull on the body falling did not act in the line of the long axis of the neck, but partly laterally. The next two men were executed two days after. The coroner did not deem a post-mortem examination necessary, but, from an external examination, I have no doubt that the bones of the vertebræ were separated in each case. In the first case I have recorded there was actual fracture of the body of the third cervical vertebra; in the second case the separation took place between the bodies of the second and third cervical vertebræ; and, as far as I could judge in the last two, luxation was about the same place; the ends of the bodies of the vertebræ could be distinctly felt separated from each other by at least two inches and a half.

If I recollect rightly, the evidence in the Dublin executions was to the effect that in all cases the vertebral bones were torn apart and the spinal cord severed. In the four cases which occurred while I was absent from Galway no post-mortem was made, but the gentlemen who discharged my duty have informed me that they had no doubt as to separation of the bones in three. In the fourth, the case in which the rope caught under the elbow, the doctor's evidence at the inquest was that there was no dislocation or fracture of the neck, and that death resulted from strangulation.

*(To be continued.)*

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A CASE OF

## HIGH AMPUTATION FOR GANGRENE OF THE FOOT; OBSTRUCTION OF THE POPLITEAL ARTERY BY HYDATID CYSTS.

BY H. MALLINS, A.B., M.B., M.CH.

JOHN T——, aged seventy-four, a labourer, always enjoyed good health until about seven years ago, when, owing to some slight injury, an ulcer formed on the anterior aspect of the middle third of the left leg. This ulcer seemed always to have been extremely painful, and for its relief, according to his account, every remedy, orthodox and unorthodox, had been tried without avail. At the end of last summer, the pain having become more severe, owing to a sloughing tendency which the ulcer began to exhibit, he was admitted into the Norwich Hospital, where he remained several weeks. Under the treatment adopted great improvement followed, and at the time of his discharge the ulcer was all but healed. A few weeks later, however, the whole foot of the affected side began to show signs of disease, the ankle became œdematous, and several of the metatarso-phalangeal joints suppurated and discharged. This recrudescence of the disease was attended with great suffering, the climax of which was reached at the beginning of January, when gangrene of the great toe showed itself. Amputation of the limb was now proposed, and, the risks of the operation having been duly explained, eagerly assented to. The operation was performed under chloroform on January 11th, by the method of long anterior and short posterior flaps, the femur being sawn through at the junction of the lower and middle third. On applying the tourniquet no pulsation of the femoral artery could be detected. Subsequently, when the fleshy parts were divided, the artery was found to be completely plugged by a firm clot. The collateral circulation seems to have been pretty well established, as six vessels required ligature. The wound having been well cleansed with dilute carbolic solution, a dressing of plain absorbent wool was applied. Everything proceeded favourably for the first forty-eight hours, when the temperature began to rise. On dressing the wound the anterior flap was found to have commenced to slough. Gangrene of the entire stump rapidly ensued, with a fatal result on the fifth day.

On examining the vessels of the amputated limb, the popliteal artery was observed to be much enlarged, presenting a fusiform dilatation, about an inch wide and four inches in length. In the process of dissection, the swelling having been accidentally pricked with the knife, a white matter, suggestive at first sight of pus, spurted out. On laying the swelling open, however, no pus could be detected. The walls of the artery were found to be thickened, but the main bulk of the dilatation was constituted by its contents, which consisted of a mass of hydatid cysts, varying in size from that of a very small pea to that of a good-sized raisin. Their walls in every case were collapsed. No hooklets could be discovered with the microscope. To clear up any doubt as to their true nature, a few specimens were sent to Dr. T. Spencer Cobbold, who most kindly examined them, and expressed the opinion that "they are unquestionably true hydatids. The ectocyst displays well-marked characteristics appertaining to echinococcus veterinorum."

*Remarks.*—It was the paper of Mr. J. Hutchinson, read before the Royal Medical and Chirurgical Society on Dec. 11th, 1883, urging the safety and expediency of high amputation in senile gangrene, that led to the undertaking of the operation in the foregoing case. It had been originally intended to amputate at the knee, but the existence of a small purulent depôt close to the popliteal space led to a suspicion of the healthiness of the tissues in its vicinity. One point to which it is desired to call attention is the early sloughing of the anterior flap. The experience of St. George's Hospital is, according to Mr. T. Pickering Pick, decidedly adverse to long anterior flaps, sloughing having taken place sixteen times in twenty-nine cases. The skin of a man aged seventy undergoes a certain amount of atrophy, a process in which its nutrient bloodvessels doubtless share. In the formation of a skin flap numerous vessels going to it must be divided, thus diminishing its vitality. Moreover, it is not improbable that a slight sloughing is quite sufficient to start off the process of gangrene afresh. For the foregoing reasons the method of long anterior flaps would seem to be unadvisable in amputation for senile gangrene. Though hydatids are found in many different situations in the human body, they seem to take up their abode in the bloodvessels but very rarely. In M. Davaine's analysis of 373 cases of hydatids, as given in Dr. T. Spencer Cobbold's work on "Entozoa," two cases occur in which the pulmonary vessels were the site of the cysts. As far as I can ascertain, these are the only cases of the kind hitherto recorded. In conclusion, it may be pointed out that there was very probably some connexion between the chronic ulcer of the leg and the plugging of the popliteal artery; either diminished blood-supply or pressure on the nerve from the bulging of the artery, leading to diminished vitality of the affected part. The constant and very severe pain would indicate the latter as the more probable cause.

Watton, Norfolk.

## NEW REMEDY FOR CHOLERA.

By SHAMSUDIN J. SULEMANI, L.M. BOMBAY.

DURING the latter part of the epidemic of cholera, which broke out in July last at Baroda (a town in India), five marked cases of this disease were treated with jadvari khatai, papita, narjili daryai, and cardamom seeds; four of these were cured and one proved fatal. The above-mentioned four drugs were mixed and given in ten-grain doses to adult patients every hour or two, according to the severity of the symptoms; in each case three or four doses were used. The following are the notes of the cases in question:—

CASE 1.—A girl of about twelve was attacked with cholera at 1 A.M., and seen by me at 6 P.M. the same day. Her body was cold, pulse almost imperceptible, eyes sunken, frequent purging, stools watery and copious, and of the colour of rice water. There was suppression of urine of twelve hours' standing. Before I saw her she had been given chlorodyne and stimulants, but without any effect. Three doses of the above medicine were administered to her, the second dose being given one hour after the first, and the third after two hours. Soon after the administration of the first dose purging diminished and the pulse became perceptible; the second dose was followed by marked improvement, and the extremities and the trunk became gradually warm. She voided urine some two hours after the third dose, and was then out of danger.

CASE 2.—An adult male commenced purging and vomiting at 6 A.M., and was treated with chlorodyne and stimulants, but without relief. I saw him at 5 P.M. the same day, and found him much exhausted. His eyes were sunken, extremities cold, and pulse hardly perceptible. Vomiting was incessant, and he could scarcely retain medicine or water, and had cramps. He had not passed urine for about eight hours. Sinapism to the epigastrium did not check vomiting, and so a mixture of equal parts of laudanum and chloroform was sprinkled over a piece of lint, which was applied over the pit of the stomach for about five minutes, though not continuously, and it stopped the vomiting. Immediately after this the medicine above referred to was given, and he gradually improved. It was repeated twice at the interval of two hours, and he passed urine and recovered.

CASE 3.—A woman aged twenty-five began to vomit and purge at 6 P.M., when chlorodyne and some other medicine were administered, by which vomiting was checked, but purging continued unabated. The next morning, at 11 A.M., I was called to see her for the first time. She was not able to speak, but could open her eyes when shouted to. She had not passed urine since the attack commenced. The whole body was cold, and there was no pulse; even the beating of the brachial artery could not be felt. Now and then cold perspiration broke out. Two doses of the above medicine were given, but there was no effect. Subsequently some other treatment was adopted by another medical gentleman, but the patient died at about 5 P.M.

CASES 4 and 5.—The remaining two cases had well-marked symptoms, and showed signs of improvement after the first dose; they were ultimately cured by two subsequent doses in one case, and by three in the other.

I may observe here that in all these five cases no food was allowed while vomiting and purging continued. Sinapism to the epigastrium (for checking vomiting) and friction and warm bottles to the extremities were ordered. As regards the medicinal properties of the above-mentioned drugs, I beg to state that the first three are said to be tonic, and recommended in Makhzanuladviya for cholera; cardamom seeds act simply as carminative. Their botanical names and the natural orders to which they belong are as follows:—

| Name of drug. | Botanical name. | Natural order. |
|---|---|---|
| Jadvari khatai. | Delphinium denudatum. | Ranunculaceæ. |
| Papita. | Strychnos ignatii. | Loganiaceæ. |
| Narjili daryai. | Lodoicea seychellarum. | Palmeæ. |
| Cardamoms. | Elettaria cardamomum. | Zingiberaceæ. |

These drugs are mentioned by Dr. W. Dymock in his "Vegetable Materia Medica." Narjili daryai has a very hard kernel, and requires to be filed before it is finely powdered.

It is obvious that the number of cases in which this new remedy was tried is too small to enable one to judge of its value; however, it deserves a further trial.

Oxford.

# A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

**Nulla autem est alia pro certo noscendi via, nisi quamplurimas at morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.**—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

## ST. GEORGE'S HOSPITAL.

### EIGHT CASES OF FRACTURE OF THE PATELLA, PUT UP IN GUM BANDAGES AS SOON AFTER THE ACCIDENT AS POSSIBLE; REMARKS.

THE following cases illustrate the method of treatment of fracture of the patella as at present practised at one of the large London hospitals. It comprises the essentials of treatment of such fractures—rest, relaxation of the quadriceps extensor of the thigh, and apposition of the fragments by direct pressure. It also permits the patient to get about at an early date after the injury, the fractured ends being still retained in good position, and the knee-joint kept extended by means of the gum bandage. We would also refer to the

remarks appended to Mr. Rivington's case, where suppuration followed paracentesis of the joint, in a case of simple fracture of the patella.[1]

For the report of the following cases we are indebted to Mr. Allingham, house-surgeon.

CASE 1. (Under the care of Mr. Holmes.)—Thomas S——, aged thirty-five, carman, was admitted on Sept. 7th with the following history. While walking along the street he slipped off the kerb, and in trying to save himself from falling under his van heard something give way with a snap. Attempting to rise, he was utterly unable to use his left leg, so he was brought to the hospital. On admission the left patella was fractured transversely about its middle, the fragments being separated one inch; there was very little effusion into the knee-joint. It was immediately done up in the following manner. The limb having been thoroughly washed, the fragments were brought together with ordinary strong strapping. The centre of a piece of strapping one inch and a half wide, and long enough to encircle the limb twice, was placed immediately above the upper fragment, and the two ends pulled in the direction downwards and backwards, crossed behind the joint, and brought forward to meet upon the tubercle of the tibia. This tends to bring the upper part of the patella down to the lower. The other fragment was treated in like manner; a similar strip of strapping was placed just below the lower fragment, then crossed behind the joint and made to meet above the patella in front of the thigh. Next, strapping, two inches and a half wide, was placed over the front of the patella, each end drawn forcibly backwards, crossing behind the joint, brought forwards again, so that the ends might stick on the front of the knee. (Great care must be taken that none of the strapping slips in the slightest degree.) The limb was then well starched and covered evenly from the level of the base of the little toe to about two inches below the perineum, with two thicknesses of flannel bandage, and this in a similar manner encircled by a coarse muslin bandage three inches in width, strong thick gum being then spread over this. Two more layers of bandage, alternating with two of gum, having been applied, the splint was completed. During this process—or after the fragments were brought together with strapping—the leg was supported by the heel, nothing being placed under the thigh or knee that might tend to bend the joint in the slightest degree; for it is absolutely necessary that the fracture be not disturbed, and that the gum bandage should dry with the leg in a state of extreme extension. During the drying the leg was raised by a block placed under the heel to prevent the wet bandage sticking to the bed; as soon as the outside dried, the limb was placed in a patella junk. (The outer layer of gum takes about four hours to dry, but two days are required for the splint to become firm and hard.)

Sept. 8th.—Splint is drying fast, being elevated in a patella junk. Patient complains of pain in the knee; the toes are not swollen. Temperature normal; pulse 80; tongue clean and moist. Did not sleep well.

10th.—Still complains of a little pain, but much less than it was. Temperature normal; slept well.

14th.—No pain; got up and walked about the ward with the help of crutches.

21st.—Left hospital, fourteen days after the accident.

The patient returned about the middle of October, the splint being quite comfortable. He was told to come back at the end of three months, when the splint will be removed and a leather knee-cap supplied him.

CASE 2. (Under the care of Mr. Holmes.)—William B——, aged thirty-five, a painter, fell five feet and fractured his patella transversely by indirect violence on October 30th. On admittance, the fragments were separated about one inch. The accident occurring near the hospital, he was seen about ten minutes after, and as there was no effusion, the fractured surfaces were brought together with strapping as described in Case 1, and the limb enveloped in a gum bandage.

Oct. 31st—Had a good deal of pain in the knee, which was much relieved by elevation.

Nov. 1st and 2nd.—Still some pain, but not so severe; temperature remained normal; toes warm and not blue or swollen.

6th.—Patient was up but had not put his foot to the ground.

12th.—He left the hospital, thirteen days after the accident, with orders to return in a month.

Dec. 15th.—The splint becoming loose, it was removed. The fracture was in good condition with a quarter of an inch between the fragments. Another splint was then applied and he was told to come back at the end of January for a knee-cap.

CASE 3. (Under the care of Mr. Rouse.)—Arthur M'——, aged forty-six, was brought to the hospital on May 24th with the following history:—Whilst running he slipped on a stone, and, trying to save himself, felt something give way in his knee. The right patella was found fractured transversely, the fragments separated about an inch and a half to two inches, with some effusion into the knee-joint. As this was not considerable, and as the upper and lower fragments of the patella could be placed in good apposition, the limb was put up immediately in gum bandage as described in Case 1. For a few days he complained of pain in the joint, but as he was able to sleep and eat, and as his temperature remained normal, it was not deemed necessary to remove the splint. The pain in this case was greatly relieved by well elevating the limb. On June 2nd he left his bed and was about the ward, leaving the hospital on June 6th, thirteen days after the accident, with orders to come up to be seen every month. In July he presented himself and urged to have the splint removed, as he felt confident the leg was well. This was done, and the upper and lower fragments were found in very good position, firmly bound together with an interval of one-third of an inch. He was ordered a leather knee-cap.

CASE 4. (Under the care of Mr. Rouse.)—Sarah D——, aged thirty-four, pregnant seven months, was admitted on April 28th. While descending some stairs she caught her foot in the carpet and fell down. The left patella was found fractured transversely; no effusion into the joint, fragments separated about three-quarters of an inch, but easily approximated so as to elicit bony crepitus. The joint was strapped and the gum bandage applied at once. That night, and for the next few days, the patient complained of pain, which was greatly mitigated, as in the former, by elevation of the limb.

On May 6th she was about the ward, and left the hospital on the 8th, ten days after the accident. This patient has not been to the hospital since.

CASE 5. (Under the care of Mr. Pick).—Sarah MacP——, aged sixty, while walking along the street fell and struck her knee against the pavement. She was immediately taken home and fomentations ordered by her medical man. On June 29th, seven days after the accident, she came to the hospital. The left patella was fractured obliquely, the line of fracture running from without upwards and inwards, the fragments separated one inch. There was a large quantity of fluid in the joint, and great bruising extending over the front and sides of the joint, spreading also down the leg. Under these circumstances it was not thought advisable to treat this case as those previously described. So the leg was bandaged, including the knee, with a Martin's bandage, as tightly as the patient could bear it, the leg elevated, and an ice-bag placed over the joint. At night she complained of so much pain as to necessitate loosening the bandage, the ice being continued. This treatment was pursued for six days, when all the excessive fluid was found absorbed, and the fragments could be drawn together; the leg was put up in the usual way. She left the hospital on July 23rd, three weeks after admittance.

At the end of September, three months after the accident, the splint was removed. The fragments were in good position, with about one-third of an inch interval; but, as the bond of union was not strong, she had the splint reapplied for another month before commencing to wear a knee-cap.

CASE 6. (Under the care of Mr. Haward.)—Rose W——, aged thirty-nine, married. Two days before admittance into hospital she fell from some steps, and in trying to save herself injured her right patella.

On admission, Feb. 14th, a transverse fracture was found with one inch interval between the fragments, and no effusion into the joint. The fractured bone being placed in a good position, the leg was enveloped in the gum bandage.

Feb. 15th, 16th, and 17th.—Leg quite comfortable; no pain.

18th.—She got up, leaving the hospital on Feb. 27th, a fortnight after the accident.

May 14th.—The splint was taken off. A firm, strong, fibrous band, uniting the fracture with a quarter of an inch between the fragments, existed. Knee-cap ordered.

CASE 7. (Under the care of Mr. Haward.)—Walter C——,

[1] THE LANCET, Jan. 24th, p. 154.

aged thirty-three, carpenter. Slipped, catching his foot in a carpet. In falling he heard his knee-cap break. He could not stand, so was brought to the hospital on Feb. 19th. Right patella was fractured about its middle, with an inch and a half interval. As there was no excess of synovial fluid in the joint, the leg was put up at once.

Feb. 25th.—Had been up two days, going out on Feb. 27th, eight days after the accident.

On May 19th the gum bandage was removed. Good union and close apposition of the fragments being found, a knee-cap was ordered.

CASE 8. (Under the care of Mr. Haward.)—On March 17th Charles W——, aged thirty-two, drayman, was brought with the following history—viz., that he fell while walking on glazed tiles. On admission the left patella was found fractured, the fragments separated widely, nor could they be seen owing to the amount of fluid in the joint. This evidently was a case for the use of Martin's bandage, applied as in Case 5. After three days of this treatment the fluid was absorbed and the leg encased in gum bandages. The patient got up on March 23rd, and left the hospital on the 25th, eight days after the accident. The splint was taken off on July 2nd, and the fragments were found united by a firm and thick fibrous band, and separated half an inch.

*Remarks.*—With regard to this method of treatment, there are some points worthy of observation. It is well known that bringing the upper and lower parts of a fractured patella together tends to tilt the fragments so that the posterior edges of the fractured surfaces meet only, leaving an interval between the anterior edges. Now, it is to remedy this displacement that the third piece of strapping is used, the object being to press on both pieces, and so overcome the tendency to tilt. The amount of fluid in the joint is the indication for the method of treatment to be adopted. If the effusion is great, a Martin's bandage should be used for the first few days. On the other hand, a fracture accompanied with no increased secretion of synovia should be done up at once, for if left for only three or four hours there is sure to be considerable swelling. Previous to putting the fracture up in gum bandage it should be borne in mind, after the strapping is applied, to cover the limb in a double thickness of flannel bandage; for, as this is slightly elastic, it allows the leg to swell to a limited extent. Care should be taken, when putting on the muslin bandages, not to apply them too tightly, and as soon as the gumming is finished to elevate the limb. For two or three days after completion of the splint special attention should be paid to the temperature; if this remains normal, the tongue moist, and the toes warm, there is no need of alarm if the patient complains of pain; but should, on the other hand, the temperature rise, or the toes become swollen, cold, or blue, the splint must be immediately removed.

In treating these cases in the manner described quite as good results are obtained, with no more danger to limb or life and with the following advantages. The patient is not confined to bed for six weeks or two months, as he is if treated by Malgaigne's hooks or any other form of apparatus generally used, but can, as a rule, after a few days, say fourteen at the most, go home and undertake any light work. By strapping the fractured surfaces together and not interfering with them for three months it must be apparent that there is more probability of obtaining firm and good union than by those methods of treatment where it is necessary that the fracture should be frequently attended to, and the fragments thereby be more often disturbed; and certainly the method described is much less distressing to the patient. Putting up the leg in gum bandages rather than plaster-of-Paris has these advantages—viz., the splint is much stronger, does not bend or crack as plaster is apt to do, and, lastly, it is a much lighter apparatus.

## WOLVERHAMPTON AND STAFFORDSHIRE GENERAL HOSPITAL.

### CANCER OF THE RIGHT KIDNEY; CONGENITAL ABSENCE OF THE LEFT; NECROPSY; REMARKS.

(Under the care of Mr. F. E. MANBY.)

FOR the following notes we are indebted to Mr. J. W. Batterham, house surgeon.

George W——, aged forty-eight, a painter, was admitted on December 11th, 1884. The patient was a sallow, delicate-looking man, and suffered from dyspeptic symptoms. He stated that for fifteen years he had experienced pain in the right loin, that eighteen months ago he first noticed blood in his urine, and that five months ago his urine was again bloody, this time for three days, but since then he had had several attacks of hæmaturia at irregular intervals. He had lost flesh considerably during the last eighteen months. On the day of admission the urine contained a large quantity of blood and disorganised clot. No cells likely to be of malignant origin were found on microscopical examination of the urine. On passing a sound into the bladder no stone or tumour could be detected, nor was there any blood in the urine after the sounding. Examination of the abdomen revealed a smooth ovoid elastic tumour in the right lumbar and iliac regions, extending slightly into the umbilical region; its rounded margin could be distinctly felt on three sides, but above it appeared continuous with the liver at the level of the ninth rib. The tumour followed the descent of the liver and diaphragm on deep inspiration, and receded with them during expiration. The manipulation of the tumour was followed by the appearance of a little blood in the urine. The question of operation was entertained, but the patient was unwilling to submit to any operative interference. Meanwhile he caught cold, and died of bronchopneumonia.

Post-mortem examination showed the right kidney symmetrically enlarged, but presenting several small hemispherical bosses on its surface. It measured six inches by four inches and weighed twenty-five ounces. On section it was found to be infiltrated by a mass of encephaloid cancer. It contained no calculi or other concretions. Though a careful and prolonged search was made, no vestige of the left kidney and ureter could be discovered; nor could any trace of the left renal vessels be found, except a slight dimpling of the inner surface of the aorta at the spot where the renal artery would normally have been given off. On further dissection, it was found that the left vesicula seminalis was also absent, although the vas deferens pursued a perfectly normal course. Both testicles and both adrenal bodies were present and normal in appearance. No other abnormalities than those above described were discovered. There were no secondary deposits of the malignant growth. There were no adhesions between the liver and kidney, nor any apparent deficiency of perinephritic fat by which the mobility of the renal tumour might have been accounted for.

*Remarks by* Mr. MANBY.—The mobility of the tumour was a perplexing element in the diagnosis of the case. Dr. W. Roberts states, with reference to renal cancer that the "fixity of the growth is usually a marked characteristic"; and had there been no hæmaturia, as happens (according to the above authority) in nearly half the cases of cancer of the kidney, the tumour would in all probability have been diagnosed as of hepatic origin. The absence of any other ascertainable cause of hæmaturia, and the appearance of blood in the urine immediately after manipulation of the abdominal growth, indicated, however, the nature of the case. The presence of one kidney only, illustrates one of the dangers of nephrectomy—viz., that of removing an only (or the only serviceable) kidney—an error which should be avoided by the use of Mr. Davy's rectal lever as a diagnostic instrument. By compression per rectum of the ureter of the kidney it is proposed to remove the flow of urine from the other ureter into a previously emptied bladder, as is readily demonstrable. This means of diagnosis has been successfully employed by Mr. Davy and others; and I have satisfied myself, by experiments on the cadaver, that the rectal lever will effectually control the passage of fluid along the ureter.

### RUPTURE OF THE LUNG AND (?) RUPTURE OF THE LIVER; RECOVERY; REMARKS.

(Under the care of Mr. KOUGH.)

The notes of this case are also furnished by Mr. Batterham.

Eli T——, aged six years, was admitted on Dec. 21st, 1884, having been run over a few minutes previously by a light waggon, two wheels of which were said by a bystander to have passed over the patient's chest. He was sensible, but pale and collapsed. The pulse was small, quick, 168 per minute; respiration was abdominal, short, shallow, 76 per minute. Two hours after admission, when the effects of the shock were passing off, the following notes were taken. "Pulse 160; respiration 72. The short respiratory movements are restricted to the abdomen and left side of the chest. The little patient lies on his right side, with his thighs flexed on the abdomen, and complains of pain, which he locates when asked by placing his hand just above the umbilicus.

He has passed urine, which has been tested and found normal; and he feels sick. There are no broken ribs. The chest is distended; the right side is motionless, and the left nearly so. The whole chest is hyper-resonant, the liver dulness being completely lost. The breath sounds are exaggerated on the left side, and of a distant amphoric character on the right side. The tinkling bell sound which can sometimes be elicited on auscultating a case of pneumothorax is absent. There is a bruise over the right hypochondrium, and tenderness on pressure in the same region, but very little tenderness over the other parts of the abdomen. In the patient's present position (right lateral decubitus) abdominal percussion shows dulness on the right half of the belly, transgressing the median line. On turning the patient on to his left side the dulness changes its position to the left side, the dulness, however, remaining in the extreme right flank." As the administration of opiates seemed contraindicated by the embarrassed condition of the patient's breathing, no drugs were administered. He was kept lying on his right side, and carefully watched. By the 23rd his condition had improved. He had no longer the slight duskiness of the face. Pulse 136; respiration 44.

Dec. 25th.—The patient now lies on his back; both flanks are dull. The right side of the chest is less in circumference than the left, and moves less freely.

26th.—Liver dulness is not appreciable in the right nipple line. The patient feels better, has no pain, and wants to sit up in bed.

28th.—Respiration still less marked on the right side; no abdominal tenderness.

The patient was kept in bed until his discharge, at his parents' request, on Jan. 8th, 1885. He had manifested no jaundice, and his stools had been of normal colour.

*Remarks by* Mr. KOUGH.—This case is of some interest as illustrating not only the possibility of the occurrence of extreme pneumothorax from compression of the chest without fracture of the ribs, but the readiness with which this condition is remedied by nature without aid from the surgeon. Le Gros Clark in "The Diagnosis of Visceral Lesions," remarks that he has never found it necessary to perform paracentesis for this condition, and does not remember that it was ever so performed at St. Thomas's Hospital since his connexion with that institution. With reference to the injury to the liver, the absence of jaundice, of bilious stools, and of any marked signs of peritonitis (though this need not necessarily have been general or severe), tends to disprove the existence of any extensive laceration of the liver. On the other hand, physical signs showed the presence of a large quantity of fluid in the abdomen. This fluid could not, from the negative symptoms, have been derived from the intestines, bladder, or kidneys, and we are thus limited to the liver and spleen in our search for its presumed source. The reasons for assuming that the liver rather than the spleen was the source of the fluid in the peritoneal cavity are as follows:—1. The greater frequency of hepatic lesions due presumably to the greater fixity and bulk of the liver. 2. The presence of external marks of injury in the region of the liver. 3. The presence of tenderness over the liver, with a corresponding absence of extreme tenderness in the splenic region.

# Medical Societies.

## PATHOLOGICAL SOCIETY OF LONDON.

*Violet Pigment discharged from the Mouth.—Atrophy of the Liver.—Rupture of Aorta.—Deposit of Bone in Testis.—Thrombosis of Vena Cava and Primary Sarcoma of Adrenal.—Congenital Sarcoma of Testis.—"Red-Water."*

AN ordinary meeting of this Society was held on Tuesday last, Dr. J. Syer Bristowe, F.R.S., President, in the chair.

Dr. DICKINSON showed a handkerchief stained with Violet Pigment discharged from the Mouth. The case was that of a lady sixty years of age. Accidental introduction of pigment appeared to be out of the question. False teeth were worn on the side of the mouth from which the pigment was discharged. The tongue, on the right side, was coloured with the same vividly blue colour; there was no doubt that the pigment was derived from an aniline blue pencil, but there appeared to have been no deception practised by the patient. The discovery of the nature of the pigment was due to Dr. Paddison of the Surrey Lunatic Asylum; and Dr. Tindale, under whose care the patient was, subsequently detected a fragment of the blue pencil in the false teeth which the patient wore.—Mr. STEPHEN PAGET mentioned a somewhat similar case in which the half of the tongue was discoloured also from an aniline blue pencil.—Dr. RADCLIFFE CROCKER referred to a case in which a lady every time she washed her hands noticed that the soapy water became of a blue colour; this turned out to be due to the presence of some minute leaves of an orchid which were wafted unseen into the water.—Mr. PEPPER thought there was nothing extraordinary in the presence of aniline dyes in handkerchiefs.—Dr. BRISTOWE spoke of a case in which the linen of a lady became brown; this was not due to hair-dye but to a notorious hair-wash. Mention was made of a case in which a foreign body was passed from the bowel of a female; the body was of fusiform shape and transparent, and had a tail-like end. It proved to be the pulp of an orange.

Dr. CARRINGTON exhibited a specimen of Atrophy of the Liver, which might, however, have been one of acute cirrhosis. The patient, aged twenty-three, was a man, admitted on Nov. 13th, 1884, into Guy's Hospital, under the care of Dr. Goodhart. He had drunk, at least, eight pints of beer and some whisky every day for some weeks past. There was no history of gonorrhœa or syphilis. About two weeks before admission tremors appeared, great weakness set in, and the eyes became yellow. The body was well nourished; the mind was obscured; and the patient answered "No" to every question that was put to him. The respiratory and circulatory systems were normal; the liver dulness reached from the sixth rib in the mammary line to the lower border of the thorax; the urine was dark, acid, and contained no bile or albumen. After a time vomiting supervened, and the patient became more and more stupid, and finally delirious. Five days after admission epileptiform convulsions set in, and the seventh of these proved fatal. At the autopsy the body was well nourished; the conjunctivæ were slightly jaundiced; there was nothing abnormal found in the contents of the head; the lungs showed some hæmorrhagic patches, which ranged in size from a hazel-nut downwards; the heart was healthy, the left ventricle being firmly contracted; the peritoneum and large and small intestines were healthy, but the latter contained much albuminous coffee-ground material; the spleen was firm, and weighed 7½ oz.; the kidneys were enlarged and full of blood, and weighed 17½ oz. together; the shoulder-, elbow-, wrist-, hip-, knee-, and ankle-joints were healthy; the liver weighed only 33 oz., and consisted of yellow swollen bulging portions, which contrasted with depressed areas having a wrinkled appearance. The pale-yellow swollen mass on section showed the lobular arrangement of healthy hepatic structure, and two-thirds of the right lobe were composed of this; several small rounded nodules of the same kind were seen in the left lobe, but the rest of the hepatic tissue was bluish-brown in colour and homogeneous, having lost all lobular arrangement and appeared to be dotted over with white points of what seemed fibrous tissue. The dark, grumous, coffee-ground material was also present in the stomach. Microscopical examination showed the yellow part to consist of hepatic cells of normal appearance, though the protoplasm was granular or had oil globules in it. The darker part of the liver consisted of nuclei of uniform size and like leucocytes; this part also showed the highly vascular, loose-textured tissues of granulations or early fibrous tissues; there was some increase of the connective tissues around the portal canals; in many specimens an appearance as of a new formation of ducts was visible. With regard to the nature of the process, the parts of the liver where the red tissue abutted on the yellow gave the most information. Here between the rows of liver cells and between the hepatic cells themselves the cellular infiltration could be seen. There was no evidence of conversion of hepatic cells into connective-tissue corpuscles. The process appeared to be one of an acute inflammatory nature, and partook more of the characters of cirrhosis than of one of simple atrophy. He suggested that the specimen was one which should be submitted to the Morbid Growths Committee.—Mr. SHATTOCK said that the appearances resembled those of a specimen of actinomycosis, which he had recently examined, and asked whether Dr. Carrington had detected the micro-parasite of this disease in the specimen in question.—Dr. PARRY PRICE said that the specimen

resembled one which he had shown to the Society last year, in which there were bands of fibrous tissue enclosing islets of hepatic tissue; he had detected no parasite in the specimen shown by him.—Dr. BRISTOWE said that he had at first understood that the swollen yellow portion of the liver was the diseased part, but this appeared not to be the case.—Dr. CARRINGTON, in reply, did not suspect the presence of actinomycosis; he did not think that his specimens altogether resembled those of Dr. Price.

Dr. CHARLEWOOD TURNER showed a specimen of Rupture of the Thoracic Aorta. It was removed from the body of a man aged sixty-four, a labourer, who was seized with collapse of sudden onset and died from syncope the day afterwards. He had frequently suffered from faintness, dyspnœa, and palpitation. The loose stools contained some blood on the day of his admission to the hospital. At the autopsy the arch of the aorta exhibited an L-shaped rupture; the longitudinal rent was situated on the posterior aspect of the aorta. The recent transverse limb of the L-shaped rent passed round the whole circumference of the aorta. The rent led into the dissecting aneurysm, which had a wall of smooth lining membrane, and lay in the same plane as the recent separation of the coats of the aorta. The aneurysm had ruptured into the pericardial cavity, which contained a black blood-clot and some serous fluid. The aorta was atheromatous, but not in the first part; the left ventricle was hypertrophied, and its cavity nearly empty; the kidneys were granular; the cerebral arteries were atheromatous; the lungs were emphysematous. The day before the man's death it was probable that extravasation into the connective tissue of the mediastinum occurred, and the free extravasation into the pericardium probably accompanied the fatal seizure; these extravasations were due to the sudden giving way of the supporting blood-clot as the result of some sudden alteration in the arterial blood pressure. Dr. Peacock had put on record some cases of rupture of the aorta, some of which were of a T shape. In the present specimen the inner and a few layers of the middle coat were torn through in the lower part of the longitudinal rent, and the middle coat was completely rent in the upper part. A second specimen was shown of perforation of the aorta into the pericardium. The case was that of a woman thirty years of age. The arch of the aorta was extensively diseased, of dull appearance, and in many places eroded with intervening raised areas—probably in different stages of endarteritis.—Dr. NORMAN MOORE remarked on the presence of the cardiac hypertrophy associated with the condition of the kidneys, and said that in nearly every case of aneurysm of the aorta thus associated he had found that the patient was the subject of gout. In a case of hæmorrhage into the pericardium from rupture of an aortic aneurysm, where the kidneys were diseased, he had found gouty changes in almost all the joints of the body.—Dr. TURNER said that he had not examined the joints in his case.—Dr. NORMAN MOORE, in reply to a question from the President, said there were many cases of granular kidney in which no gouty changes existed in the joints.

Dr. PARRY PRICE showed specimens of Bony Deposit in the Testes and Epididymis, which were removed from the body of a man aged from fifty to sixty, who was admitted into the hospital in a comatose condition. There was cirrhosis of the liver and enlarged, slightly granular kidneys, cystitis, and two strictures of the urethra; the hard deposit in the testes and epididymis of both sides consisted of typical bone; no healthy glandular tissue could be seen in the testes or epididymis; the vas deferens was healthy. The symmetrical nature of the deposit was remarked on. The changes were probably the result of an old orchitis, following an urethritis, of which the strictures were evidence. He could find no account of any similar case. No cartilage was present in the specimen.—Mr. ALBAN DORAN asked whether there was any suspicion of the disease being of the character of a dermoid tumour. Dermoid tumours of the testes were very different from those which were found more frequently in the ovary. He did not think the specimens were related to the "dermoid class," and Dr. Parry Price agreed with him.

Dr. COLCOTT FOX showed a specimen of Primary Sarcoma of the left Suprarenal Capsule, with Thrombosis of the inferior vena cava and right auricle, taken from a child aged two years and a half. There was only a history of phthisis on the mother's side, and a possible history of syphilis in the family. The patient was the fourth child, and had always been very fat; there was a cutaneous eruption at the end of the first year, but no snuffles. When first seen, at the age of two years, she was very rickety and of bloated appearance, with a dusky hue about the cheeks, and remarkably hairy, especially about the genitals. For four months there had been enlargement of the abdomen, with a ravenous appetite and great thirst. There was a great deal of sighing. There was no œdema of the lower limbs, nor any specially enlarged subcutaneous veins. A tumour was felt in the left side of the abdomen, occupying the loin, and evidently not the spleen. The bowels were constipated; the urine was normal. Some days after first being seen she had an attack of vomiting, in which lividity and rapid breathing were observed. A similar seizure occurred later on, and the temperature was found to be 102·6°; there was a rapid feeble pulse, but no cardiac bruit could be detected; after stercoraceous vomiting the patient died. At the post-mortem examination the face and neck were swollen, the lips blue, the vulva and clitoris were much hypertrophied, the liver weighed 38 oz.; there was no clot in the portal vein; some dark grumous fluid escaped on removal of the tumour; the left kidney was healthy, but somewhat distorted in shape. The mesenteric glands were the seat of secondary deposits. There was a completely decolourised clot, filling the inferior vena cava and adherent to its walls, and reached along its whole length; it extended to and almost completely filled the right auricle, and projected through the auriculo-ventricular orifice. The uterus and ovaries were large. The tumour was about the size of a cocoanut, and had flattened the kidney; there were areas of hæmorrhage in it; it was microscopically proved to be a large-celled sarcoma. The sections were made by Mr. John Shaw. Thrombosis of the vena cava had been reported by Dr. Moxon in a case of pyæmia with abscesses in the pelvis. In the eighteenth volume of the Transactions Dr. Greenhow had placed on record the case of a girl, aged twelve years, in whom a suprarenal tumour existed. Merkel had described similar tumours. Dr. S. West and Dr. Dickinson had recorded other cases. In Dr. Dickinson's case the gipsy colour without bronzing, the enormous appetite and the vomiting, and other features closely resembled the case now recorded.—Dr. BRISTOWE said that he had seen a case of primary "cancer" of both suprarenals in a Chinese youth, and thought it was possible in the light of recent investigation that this might have been one of sarcoma.—Mr. SUTTON spoke of a specimen of a tumour replacing the right suprarenal capsule in a marmot; the liver and spleen were the seat of secondary growths. This tumour had the structure of the zona fasciculata of the suprarenal body. He had met with similar tumours in a man. He referred to a paper published by Grawitz in Virchow's *Archiv* on the subject of Supernumerary Suprarenal Capsules; tumours having the structure of the cortex of the adrenal were found beneath the capsule of the kidney, and also about the ovaries in the broad ligament. He considered that in the face of such facts we might have to establish a new variety of tumours to include those he had referred to.—Dr. DICKINSON spoke of two cases which had been under his observation. In the first case the voice was very gruff and of a bass tone; the words uttered by the precocious infant were very few, but consisted of expletives used by the lowest classes of society; the other characters had been referred to by Dr. C. Fox. The second case had been in the Hospital for Sick Children, Great Ormond-street, and was that of a female child, aged three years, who had also great development of the external genitals, which were studded with large hairs; there was an abdominal tumour having all the characters of a renal tumour, but the memory of the first case he had seen led him to diagnose tumour of the suprarenal body; the autopsy confirmed the diagnosis. In both the cases the relation of the colon to the tumour was rather different from that which usually obtained in renal tumours, for the tumour appeared to be rather above the level of the ascending colon. He thought that this clinical point might establish a distinction of diagnostic value between renal and suprarenal tumours.

Dr. NORMAN MOORE showed a specimen of Tuberculosis of the Kidneys of the Ox with Bacilli. The kidneys were much enlarged, and one completely changed into a great white mass, with hardly any remains of kidney structure except the external lobulation. One lobe of the other kidney had undergone a similar complete change, and elsewhere it showed numerous white nodules. These, as well as the completely changed kidney, showed abundant groups of bacilli, and the bacilli themselves agreed in form, method of staining, and size with the bacilli of tubercle in man. The

tuberculous part of the kidneys was nowhere broken down, but showed many zones of more or less complete calcification. The morbid change corresponded to the description of "Perlsucht," and the abundance of bacilli present confirmed the opinion that that disease was a true variety of tuberculosis, and not a lympho-sarcomatosis, as it was once believed to be.

Dr. SILCOCK showed a specimen of Congenital Sarcoma of Testes removed from a child aged eight months, who was under the care of Mr. Owen in St. Mary's Hospital. The left testicle was enlarged at the time of birth, and had gradually enlarged; it had an ovoid outline, and was not translucent; the spermatic cord was thickened; the tumour was encapsuled in the body of the testis, and sharply limited by the tunica albuginea; the tunica vaginalis and vas deferens were healthy. The tumour was a sarcoma of varying-sized cells, chiefly of spindle and oval shape. Mucoid degeneration was present in places. He said that such congenital growths were of infrequent occurrence, and no record had been found of a similar specimen. In medical literature cases of congenital "cancer" were referred to. These might possibly be sarcomata.

Mr. PARKER also showed a specimen of Congenital Sarcoma of Testes removed from a child three months old. The tumour had been noticed immediately after birth. On section it had a glistening appearance like wax. The soft matrix was composed of a large number of dilated tubules; there was much myxomatous tissue present, and also islets of cartilage. The congenital sarcomata were very rare. He had collected eighteen cases of tumour of the testicle occurring in children under ten years of age. He said that Mr. Athol Johnstone had recorded a specimen of tumour of the testicle in a child which contained a mass of bone. There had been no recurrence so far as he knew in the case from which he had taken the specimen shown. The tumours of the testicle in the child were very liable to recurrence, and the pleura was apparently a favourite seat for recurrence. He watched one case of recurrence in the pleura, and signs like those of pleuritic effusion were observed. The abdominal glands were frequently the seat of secondary deposits. In the eleventh volume of the Transactions Mr. T. Holmes had recorded a case in which recurrence took place in the lumbar glands, and a mass weighing 7 lb. was the result.

Dr. DICKINSON gave an account of an Epidemic of Renal Disease in Oxen, which had happened on the farm of a gentleman, an experimental farmer. The epidemic of "red-water" broke out in a herd of shorthorn oxen, and affected at least half the number with almost uniformly fatal result. The urine was loaded with blood, and there were casts of enormous size; turpentine was used as a remedial agent. He had examined the kidney of an ox which had survived the attack of renal disease six months. The kidney was in a typical state of interstitial nephritis. One kidney was more affected than the other; they were granular on the surface. The cause of the epidemic is unexplained. Some said it was the use of poor after rich pastures; others said it was digitalis; possibly the ingestion of "bracken" might account for the disease.

The following card specimens were shown:—Dr. Turner: (1) Ulceration of Aorta and Valves; (2) Aneurysm of Splenic Artery. Dr. Norman Moore: Cavity in Lung of an Infant. Dr. Chaffey: (1) Early Sarcoma of Testis; (2) Congenital Malformation of Pulmonary Veins; (3) Congenital Malformation of Heart. Dr. Ernest Clarke: Congenital Malformation of Heart. Dr. Hebb: (1) Two Cases of Aortitis; (2) Misplaced Kidney; (3) Tricuspid and Mitral Stenosis; (4) Cancer of the Uterus with Myomata; (5) Urethral Calculus.

## HARVEIAN SOCIETY OF LONDON.

A MEETING of the above Society was held on Thursday, March 5th, Dr. T. Morton, President, in the chair.

Mr. T. W. CARMALT JONES exhibited a Single Apparatus for the Transfusion of Defibrinated Blood. The instrument consisted (1) of a receiver for the blood, in which defibrination was effected by whipping; (2) of a cannula, with movable connecting piece, for insertion into the vein of the patient; (3) of a funnel-shaped vessel, curved inferiorly like the letter L, and fitted with a perforated cap, through which pressure could be set up at the surface of the defibrinated blood by means of an indiarubber tube and hand-ball. A short piece of tubing, furnished with a spring-clip, established the connexion between the funnel-shaped reservoir and the cannula when the latter had been introduced into the vein. The various parts of the apparatus could be thoroughly cleaned, with the exception of the connecting tube, which required to be renewed after each operation.—Mr. JENNINGS said that he had listened with great interest to Mr. Carmalt Jones's able demonstration of his transfusion apparatus. For the treatment of acute anæmia (hæmorrhage being first arrested), the intravenous injection of saline fluid was sufficient to meet the exigency in the great majority of cases. Saline fluid could be safely substituted for blood up to a quantity which bore a definite ratio to the body weight (as ascertained experimentally in dogs); and it was only where this quantity had been exceeded by the hæmorrhage that transfusion of blood became indispensable. The nutritive value of blood was not to be underrated; and where transfusion was indicated for the sake of nutrition, the employment of whole blood would be better than that of defibrinated blood. This could be easily effected by means of a well-managed apparatus for the transfusion of blood and saline fluid, which Mr. Jennings exhibited to the Society (*vide* THE LANCET, Sept. 1st, 1883).

Dr. C. J. HARE read a paper entitled "Emetics: their Present Neglect in the Treatment of Disease. Is it reasonable? Is it right?" The subject of this communication was one of the numerous points referred to in a previous address on "Good Remedies out of Fashion." Although not a panacea, in certain cases emetics cured in a marvellously short time, and in others they alone appeared capable of saving life. The author passed in review the various members of this group of drugs and their doses. Speaking generally, ipecacuanha was the most useful, in doses of twenty to twenty-five grains of the powder mixed with water, or of six to eight drachms of the wine. Now and then purgation resulted instead of emesis, but persistent diarrhœa was never set up. The chief value of emetics consisted in their mechanical action upon the viscera: the stomach was not only emptied, but its innumerable follicles were cleared by pressure; the lungs were compressed and mucus forced out of the air-tubes; and the œsophagus, larynx, and fauces were swept clean. Allusion was made to cases of recurrent vomiting, commonly termed "bilious sick headaches," although more justly to be called "stomachaches in the head." The persistent vomitings were endeavours of nature to expel the slimy mucus of the gastric follicles and the morbid ferments which it contained. The desired result was often at once effected by an emetic. Many anomalous ailments, accompanied by loss of appetite, nausea, the non-enjoyment of life, ill-temper, &c., were due to a similar cause, and similarly relieved. The removal of the ropy mucus was promoted by washing out the stomach by means of warm water, which excited additional vomiting. Emetics were sometimes of signal service in severe bronchitis and in capillary bronchitis; the fear of "exhaustion" being produced by emetics was almost confined to those who never administered one. Attacks of catarrhal croup might be cut short, in children, by half a teaspoonful of antimonial wine; and in membranous croup, expulsion of the tough exudation was sometimes effected. Emetics were useful in the early stages of continued fever, of scarlatina, and of measles, and in some cases of whooping-cough. They were decidedly beneficial in the treatment of delirium tremens, and also in acute mania. By the same means the paroxysms of ague could be greatly modified, and either arrested or rendered more amenable to quinine. Drugs and diseases bear much the same mutual relation as in former ages; and as emetics were then found useful, so they would be now if fashion did not prevent their employment.—In the brief discussion which followed, Dr. DAY referred to the value of emetics in whooping-cough; and Dr. CLEVELAND insisted upon the necessity for caution, which he had learnt by experience, and pointed out that the more habitual use of purgatives in recent practice had greatly lessened the need for emetics.

## MIDLAND MEDICAL SOCIETY.

AN ordinary meeting of the above Society was held on March 18th, Mr. T. H. Bartleet, F.R.C.S., in the chair.

Mr. TAYLOR showed a Fibroma of the Abdominal Parietes removed by Mr. Tait. This was considered to be a specimen of a special class of tumour, occurring in close relation to

Poupart's ligament, and into which the muscles of the abdominal wall are extensively inserted.

MR. TAYLOR also exhibited a cast of a foot illustrating recovery after Disease of the Tarsus, in which the mid-tarsal joint had been largely involved. The internal cuneiform bone had been removed during the process of treatment, and the resulting cavity was thoroughly drained by a tube passed through the foot. After this was done the improvement was marked and rapid. The foot had been free from any discharge for nine months, and the patient was beginning to use it again.

Dr. SUCKLING showed a case in which Subcutaneous Nodules around the knee, elbow, and finger-joints were present. The patient, a girl aged nine, had had rheumatic fever six months previously; there was a well-marked double mitral bruit, the nodules seemed to be attached to the periosteum and tendons about the joints, and were painful at times.

Dr. SUCKLING also showed a case of Spinal Meningitis which had left loss of the patellar reflexes. The patient, a man aged forty, after being much exposed to cold and wet weather three months previously, had been seized with pains in the back, aggravated by movement, and hyperæsthesia of the feet which prevented him from walking. There was also loss of control over the bladder, and tenderness on percussion over the lumbar spinous processes. After free counter-irritation in the lumbar region of the spine, all the symptoms disappeared except the loss of the knee-jerks. The case was distinguished from one of locomotor ataxia by the absence of (1) characteristic lightning pains, and (2) of the eye symptoms, also by the rapid onset after exposure.

Dr. BODINGTON read a paper based on a visit to Mons. Voisin's wards at the Salpêtrière, Paris.

## SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.

A MEETING of this Society took place on Feb. 12th.

*Perihepatitis causing Strictures of Bile and Pancreatic Ducts, and Cystic Enlargement of Pancreas.*—Dr. BANHAM exhibited a specimen showing strictures of the cystic and common bile-ducts. The pancreatic duct opened into the diseased portion of the common bile-duct, so that both pancreatic and biliary secretions had been shut off from the duodenum, with the effect of causing considerable cystic enlargement of the pancreas and dilatation of the hepatic ducts. The liver was enlarged and indurated, and there were marked evidences of old attacks of perihepatitis. Notes of the case were given. The chief symptoms had been jaundice and distressing itching of the skin, and rapid emaciation. The morbid conditions were supposed to be due to syphilis.

*Charcot's Disease.*—Mr. CATKIN showed a case of Charcot's Joint Disease occurring in the practice of Mr. A. Jackson at the Sheffield Infirmary. The patient, a joiner, aged thirty-seven, with a previously healthy history, applied at the infirmary some months ago with a painless swelling of the knee-joint. It was thought to be an uncommon state of things at the time, as moist sounds, &c., were to be heard at the apices of the lungs. It was at first diagnosed as hydrarthosis in a tubercular subject. Afterwards, the state of his pupils attracted attention in the out-patient room, and all the commoner symptoms of locomotor ataxia were discovered. The relaxation of the ligaments of the knees was less marked in the right knee.—Mr. ATKIN considered that this case, as well as the one brought forward by him two years ago, effectually negatived the friction traumatic theory. The joint lesion in the first case came on whilst lying in bed with a "nerve cyclone," and in this one the arthropathy preceded the ataxia.

*Thoracic Aneurysm.*—Dr. PORTER exhibited a case of Thoracic Aneurysm. The patient was an engineman by occupation, forty-eight years of age; there was no history of syphilis or rheumatism. An interesting circumstance in the case was that fifteen years ago the patient received a severe injury to his head by the fall of a trap-door, and a scarf-pin he wore at the time was driven into his chest for an inch and a half. For the last two or three years he had complained of pain behind the sternum, and attacks of dyspepsia and palpitation, and for two or three months of neuralgic pain down the left arm. The aneurysmal tumour was visible to the left of the sternum in the third or fourth intercostal space, and a loud, rough, double murmur audible over it. There was considerable cardiac hypertrophy and high arterial tension, but there was no inequality in the pulse of the opposite sides, or of the upper and lower limbs. There were no marked signs of nervous engorgement or other pressure symptoms. The patient had a troublesome cough, and the respiratory murmur was deficient on the left side, with some dulness and moist râles at the left base.

*Treatment of Phthisis.*—Dr. HUNT read a paper on this subject. He agreed that the disease was a modern one; and pointed out that the countries most free from it were the northern and colder regions, and he strongly recommended the selection of such countries for the cure of phthisical patients. Dr. Hunt expressed himself very sceptical on all therapeutics as remedial agents, and strongly repudiated the course of certain authorities in recommending them as cures. He had extensively employed antiseptic inhalations, but without any marked success, and was disposed to rely very little upon their potency. Iodoform was another remedy that had been tried, but the results were not such as to warrant him to recommend it in the disease. Dr. Hunt closed his paper by expressing the opinion that in the future the treatment of phthisis would come more under the domain of surgery than it had ever done in the past.

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At the meeting on Feb. 26th the following specimens were shown:—

*Enlarged Heads.*—Mr. B. WALKER introduced two very interesting cases of enlarged heads. The first was that of a man aged twenty-eight, a hawker, with abnormal development of the left side of the frontal bone. The right side of the head measured 10¾ in., and the left 12¼ in., the enlargement being apparently confined to the frontal bone, and causing a decided projection in that region. The condition was congenital, and he had been compelled always to have hats specially fitted. His memory was stated to be remarkably good, especially as regarded objects, persons and places, figures and forms, which he never forgot. The second case was that of a girl aged twelve, and was probably hydrocephalic. As an infant she suffered a good deal in her head, and was considered to have "water upon the brain." The head measured nearly 24¼ in. in circumference. Her intelligence was not impaired; she was very useful at home, but was not so far advanced in learning as others of her age.

*Aneurysm of the Aorta.*—Mr. LOCKWOOD showed a specimen of Aneurysm of the Transverse Portion of the Aorta which had burst into the left lung. The specimen was from a man aged about fifty, who was admitted into the public hospital in an unconscious condition, with blood flowing from the mouth. He only lived four minutes after admission.

*Genu Valgum; Wedge of Bone removed.*—Mr. PYE-SMITH showed a Wedge of Bone which he had removed from the Femur of a man with severe Genu Valgum. The specimen was from the right limb, a similar one from the left having been shown at a previous meeting. The limb first operated on was well, the other was healing.

*Fracture of Cervical Vertebra.*—Mr. PYE-SMITH also showed part of the Spinal Column of a man aged about forty, exhibiting a Fracture of the Sixth Cervical Vertebra. The injury had been received in a fall from a dray whilst the man was intoxicated. There was paraplegia and loss of sensation below the umbilicus, except in the distribution of the ilio-inguinal and ilio-hypogastric nerves. There was good thoracic respiration and no rise of temperature. A bedsore began to form within twenty hours of the injury, and the patient died on the fifth day. At the autopsy the cord was softened and congested opposite the fracture, and there was also a softened and ecchymosed portion, with considerable effusion of blood around it, in the lower dorsal region. This latter lesion seemed to have produced the paraplegia, and the later inflammation higher up the fatal termination.

*Aural Polypus.*—Mr. SIMSON SNELL exhibited a large Aural Polypus. It was of the fibrous variety, and grew from the wall of the meatus. It was only of interest on account of its unusual size.

Mr. ARTHUR JACKSON read a paper entitled "Changed Aspects of Unchanged Truths: The Use and Abuse of Rest." He endeavoured to show that the great truths of physiological and mechanical rest, as laid down by John Hilton in his never-to-be-forgotten and unrivalled lecture on Rest and Pain, were being lost sight of in the theories of the present day. He urged their application in the treatment of fractures, excisions, osteotomies, and in that of wounds; and the more or less complete reform of our present mode of treatment.

## WOLVERHAMPTON DISTRICT MEDICAL SOCIETY.

A MEETING of the above Society was held in the Bell Library, Wolverhampton, on April 2nd, Mr. C. G. Newnham in the chair.

Mr. VINCENT JACKSON showed a boy, aged fourteen, both of whose elbows he had excised and who had strong and useful arms; also a boy whose os calcis he had excised.

Dr. BATTERHAM showed a man whom Mr. Manby had successfully trephined for a Compound Depressed Fracture of the Skull with Perforation of the Dura Mater.

Dr. DINGLEY showed a case of Pseudo-hypertrophic Muscular Paralysis in a boy aged fifteen; also the organs of a case of purpura hæmorrhagica.

Mr. MANBY then read his paper on "Climacteric Disorder," and commenced by defining it as "a disordered state of function which tends to develop, retrograde metamorphosis coming on about the climacteric period, from forty-three to fifty, and quite distinct from the menopause in women." After graphically describing the various symptoms of this disordered condition, Mr. Manby recommended change of air and generous diet as the best treatment. At the close Dr. Totherick, Dr. Lycett, Mr. C. R. Smith, and Mr. Jackson took part in the discussion.

# Reviews and Notices of Books.

*The Inhalation Treatment of Diseases of the Organs of Respiration, including Consumption.* By ARTHUR HILL HASSALL, M.D. Lond. London: Longmans, Green, and Co. 1885.

THE best-known works on the treatment of disease by inhalation are those of Cohen and Oertel. The latter is practically inaccessible to the English practitioner, and the many improvements in the methods of inhalation, with the increase in knowledge of the value of this plan of treatment, which have been made since the appearance of the last edition of Cohen's valuable treatise have put it somewhat out of date. We are therefore pleased to see a recent work in which a mode of treatment now so fashionable is treated seriously, and to find that Dr. Hassall has discussed the subject so thoroughly and exhaustively. The practitioner who wishes to know the principles on which the inhalation treatment depends, the apparatus employed, and the probable value of any medicament which suggests itself as suitable for the treatment of any disease of the respiratory organs on this plan, may rely on finding the necessary information in this work. In Dr. Hassall's first and second chapters, the reader will quickly learn that inhalation as carried on in the usual routine manner is most inefficient, and that to employ it successfully the chemistry and physics underlying it must be carefully studied. He gives many experiments which show that four-fifths of the more important antiseptics, such as carbolic acid, creasote, and thymol, are recoverable after the completion of the inhalation when the ordinary oro-nasal inhalers are employed. Steam, especially when given off in a concentrated form, carries over a considerable amount of the substances enumerated, but a great loss occurs from rapid diffusion and the difficulty of confining and condensing all the vapour, whilst even with steam- and air-sprays it is doubtful if even a very small amount of the substance employed really reaches the air cells of the lungs. For a more satisfactory method of inhaling antiseptics extent of surface and a regulated temperature of from 60° to 70° F. are necessary, and the means for securing these essentials, either in a patient's own room or in a specially constructed chamber, are plainly and clearly described. The experiments in support of this method were given in THE LANCET of October 6th, 1883, and are restated by the author in his book. In reference to the treatment of consumption by antiseptic inhalations, we should have liked to have seen details of some careful experiments on the influence of various substances on the growth of the bacilli of tubercle in cultivating media, and in media as viscid as ordinary phthisical sputa. We have some information as to how small a quantity of any given drug can possibly reach the air cells; but without the further knowledge above indicated the whole process is an unscientific and empirical one, even if we allow the bacillus to be the primary factor in the causation of this disease. We have not yet the data which would justify us in describing antiseptic inhalation as a method of cure of consumption resting on a scientific basis, however valuable it may be in relieving symptoms and as an adjunct to other means of treatment in this and other diseases of the respiratory organs.

*A Handbook of the Theory and Practice of Medicine.* By F. T. ROBERTS, M.D. Sixth Edition. London: H. K. Lewis. 1885.

THERE is but little that calls for notice in this new edition of "Roberts' Medicine." The sixth edition appears in one volume form of suitable dimensions, and the appearance of the book as well as the clear letterpress call for expressions of satisfaction. The work gives a good representation of the present state of the theory and practice of medicine, and such a statement as this must be considered as unqualified praise when we reflect that within the compass of 1000 pages a *résumé* of the whole of medicine is comprised. In looking over the chapter on Aphasia we noticed the following sentence, the wording of which is not altogether plain. "1. There may be complete mental incapacity and loss of intellectual power, so that no ideas are originated in the mind which the individual wishes to convey, as in the case of idiots." In the preface the author thanks Dr. Beevor for assistance in revising the portion of the work that relates to diseases of the nervous system. Some students, no doubt, learn more from the somewhat rigid method of exposition which is the characteristic of the present work; and we are of opinion that where simple matters of fact have to be learnt by the student the method is perhaps better than any other that could be adopted. Where, however, a description of a pathological process has to be undertaken, we think that a system which elaborates less and which attempts a more discursive style will be found to be better suited to the exposition of the subject. The actual matter contained in the section on Diseases of the Nervous System is certainly not less than in works which are usually regarded amongst its rivals, and yet we opine that the grasp which the student acquires of this difficult subject will not be so strong as it would be were the information conveyed more in the form of continuous narrative. We confess that these are matters pretty much of individual opinion, and it is probable that the advanced student who had been well grounded in the physiology of the nervous system would perhaps acquire the facts relating to its diseases rapidly and thoroughly from Roberts' work.

*The Therapeutics of the Respiratory Passages.* By PROSSER JAMES, M.D. New York: Wm. Wood and Co. 1884.

IN the preface we are informed that this book is not intended as a manual for students, but mainly for those who have left the schools and entered upon the responsibilities of practice. The second chapter is the real starting-point of the work, and treats of nutrition in relation to therapeutics. This chapter gives in an almost popular form an account of the physiology of life so far as we at present know it. The theory of the conservation of energy in the vegetable and animal worlds may be perceived to underlie all the statements made in regard to nutrition. The physiological knowledge given in the chapters treating of food stuffs and digestion is pleasantly communicated.

Analeptics are agents for the promotion of healthy nutrition, and cod-liver oil receives consideration first at Dr. James's hand. Iron and phosphorus have each a chapter to themselves. Extract of malt, pepsin and pancreatin,

peptonised foods, bile, feeding by the nose or rectum, and forced feeding are all considered under the head of Aids to Digestion. A page is devoted to stimulants to digestion, which include condiments, bitters, tonics, acids, alkalies, and stomachic sedatives. The arrangement of the matter in this section appears to us to be open to criticism. Unless the context be closely kept in view the author might be understood to imply that forced feeding, and feeding by the nose or rectum, were aids to digestion. Again, it is perhaps not strictly correct to regard alkalies and bismuth as stimulants to digestion. These, no doubt, are trivial objections; but we think it would add to the orderly arrangement of the work if slight alterations in this regard were made in future editions. Amongst the best chapters in the book are those on Pneumatics and Topical Pneumatics. The term "pneumatic" in therapeutics is not in very common use; it was employed by Pereira to signify therapeutical agents which influence the functions of respiration and the formation of heat. Speaking of the work as a whole, it must be pronounced as sound and good, though in our opinion somewhat too diffuse. This is, however, partly compensated by the increased readability which it entails. Had the work been more compressed the student of it would have saved time, though possibly have lost pleasure. But the book is written for those—and we suppose there are such—to whom a little leisure is not yet unknown.

## INDIAN HEALTH STATISTICS.

### No. I.

THE twentieth annual report of the Sanitary Commissioner with the Government of India shows a satisfactory state of the public health during the year 1883. The average strength of the European troops for that period was 55,525, the admissions into hospital from them were in the proportion of 1336, the deaths of 10·88, the invaliding of 32·66, and the mean daily sick of 62·85 per 1000, being all lower than in the preceding year; the death-rate, indeed, is the lowest recorded in the last fourteen years. The sickness and mortality were distributed in the three Presidencies as follows:—

| | Average strength. | Ratio per 1000 of Strength. Admitted into hospital. | Died in India. | Invalided to England. | Mean daily sick. |
|---|---|---|---|---|---|
| Bengal, | 34,079 | 1463 | 11·21 | 30·89 | 65·9 |
| Madras, | 10,498 | 1013 | 10·19 | 32·70 | 58·6 |
| Bombay, | 10,948 | 1249 | 10·50 | 38·08 | 57·5 |

The admissions in all the three Presidencies were considerably lower than in 1882, and the deaths also show a reduction, except in Bombay, where there was a fractional increase. The invaliding from Madras and Bombay and the mean sick in Madras were higher than in the preceding year. Bengal still furnishes the highest and Madras the lowest ratios of admissions and deaths, but the reduction in the death-rate has been much greater in Bengal than in the other two Presidencies. Paroxysmal fevers cause about one-third of the admissions into hospital in Bengal and Bombay, but Madras enjoys a comparative exemption from them. In the two former the cases were in the ratio of 434 and 412 per 1000, while in Madras they amounted to 112 only. They are not the cause of much mortality. The disease which gives the highest death-rate in all the Presidencies is enteric fever. The mortality by it in 1883 was 2·52 in Bengal, 2·86 in Madras, and 1·55 in Bombay. For the whole force the admissions were 7·7 and the deaths 2·40 per 1000; consequently 31 per cent. of the cases terminated fatally. Omitting stations where only one case occurred, the proportion of deaths to cases ranged between 8 per cent. at Kurrachee and 66 per cent. at Gwalior Fortress. The influence of age upon the death-rate by enteric fever was shown by the mortality among men under twenty-five being 4·34, from twenty-five to twenty-nine being 1·50, and at thirty and upwards 0·70 per 1000. In like manner, as regards length of residence in India, the death-rate in the first and second years of service was 4·98, third to sixth years 1·55, and seventh to tenth years 0·55 per 1000 living in each period. Of 44 cases at Lucknow, 35 occurred in the Derbyshire regiment, "which arrived in India from Egypt on 24th November, 1882, and which was principally composed of very young soldiers." The months in which enteric fever prevailed most were April to September, the admissions into hospital having been 340, as against 89 in the six months October to March inclusive. "With regard to the etiology of the disease, no positive results of any value were arrived at." At Bangalore there was strong evidence of its connexion with the unsatisfactory nature of the water-supply, but in many of the other stations it could not be traced to any common cause. The European troops were remarkably free from cholera, the admissions having been only 1·4 per 1000 in Bengal, 1·8 in Madras, and 1·4 in Bombay, with the corresponding death-rates of 0·94, 0·95, and 0·82 per 1000. In Bengal the stations affected were Allahabad, Benares, Gwalior Fortress, and Chunar; in Madras, Secunderabad and Kamptee; and in Bombay, Ahmednugger and Deolali. Next in frequency to enteric fever as the cause of death in 1883, apoplexy and sunstroke rank in Bengal and Bombay and hepatitis in Madras; the ratio of the former was 1·32 and 1·10, and of the latter 1·72 per 1000 of the strength.

Venereal diseases have been a cause of much inefficiency in all three Presidencies, the admissions into hospital having been in Bengal 281, in Madras 289, and in Bombay 218 per 1000 of the strength. The cases of primary syphilis returned in each Presidency were 88, 111, and 63 per 1000, and of secondary 25, 22, and 21 per 1000.

The mortality among the women was in the ratio of 21·28, being higher than in the preceding year, but under the average. The most frequent causes of death among them were childbirth and abortion and phthisis. Among the children the death-rate was 46·88, being considerably lower than in the preceding ten years. Diarrhœa, dentition, convulsions, and anæmia were the most fatal diseases.

The average strength of the Native Army of India during the year was 114,830. The admissions into hospital amounted to 923, the deaths from all causes to 14·31, the discharges by invaliding to 28·12, and the constantly sick to 31·3 per 1000 of strength. These ratios are all much below the average; the admissions and mean sick are considerably under, but the deaths 3·43 above, those of the European troops during the same period. The sickness and mortality in the three Presidencies respectively were as follows:—

| | Ratio per 1000 of Strength. Admitted. | Died. | Constantly sick. |
|---|---|---|---|
| Bengal ... ... ... | 985 ..... | 13·96 ..... | 32·0 |
| Madras ... ... ... | 737 ..... | 12·51 ..... | 27·5 |
| Bombay ... ... ... | 994 ..... | 14·96 ..... | 34·7 |

This table shows the Bombay Presidency to have been the most unfavourable to the health of the native troops. Paroxysmal fevers were the most prevalent diseases in all the Presidencies; but, as was the case with the European troops, gave rise to a considerably lower proportion of admissions in Madras than in the other two Presidencies. The cases of intermittent fever were 398 in Bengal, 389 in Bombay, and 271 in Madras per 1000 of strength. The Native troops continue to show a marked exemption from enteric fever, only eighteen cases and five deaths having been returned from the whole army. Cholera did not prevail to any extent in Bengal or Bombay, but in Madras the admissions amounted to 6·2 and the deaths to 2·92 per 1000 of strength. Its prevalence was confined to Secunderabad, Kamptee and Raipur, Vellore and Trichinopoly, and among troops on the march, and two fatal cases occurred at Toungoo in Burmah. Twenty-five cases and fifteen deaths occurred in the Hyderabad contingent, and of these ten, with three deaths, were in the 2nd infantry at Ellichpur. The most fatal diseases among the Native troops were those of the respiratory system, the deaths by which amounted to 3·20 in Bengal, 4·62 in Bombay, and 1·66 in Madras per 1000 of strength. The prevalence of venereal diseases in the Native army offers a very marked contrast to that in the European force, the admissions having been only 31·6 per 1000, as against 270·3. The usual summary of the sanitary sheets of the Native Corps is given. They indicate a considerable amount of overcrowding and of insufficient ventilation, and there seems at many of the stations abundant room for improvement of the drainage and of the general sanitary arrangements.

# THE LANCET.

*LONDON: SATURDAY, APRIL 11, 1885.*


THOUGH we do not always agree with Sir WILLIAM JENNER, there is no doubt that the College of Physicians is to be congratulated on having again re-elected him to the Presidency. There are doubtless other Fellows of the College entitled to fill the chair, and qualified to do so with advantage to the College, but it is no disparagement to them to say that they can wait, and that such a Corporation as the College does well, when it finds a representative physician, to make much of him, and to refuse to let him go. The address which Sir WILLIAM delivered touched upon subjects of much interest to the profession, and we propose to dwell on one or two of the principal of these topics. Referring to the high fees charged for the double diploma of the conjoint examination, Sir WILLIAM defended them as unavoidable till the scheme was well established. We cannot see this, and we venture to think that the good establishment of the scheme would be promoted by making the fees more equal to those for similar examinations elsewhere, and more proportionate to the nature of the merely qualifying diploma for which they are paid. On the next topic we are sorry to be obliged to agree with Sir WILLIAM JENNER—in attributing the withdrawal of the Medical Bill of last year to the determined opposition of the Scotch universities. Sir WILLIAM JENNER'S position as the President of the College of Physicians and an ex-Royal Commissioner gives great weight to this statement of the responsibility of the Scotch Universities, as to which indeed there can be no doubt, after the amendment of Sir LYON PLAYFAIR and the obvious effect of his fallacies and platitudes on the resolution of those responsible for the Bill. The action of the Scotch Universities was most unfortunate for themselves. It was inconsistent, as they had in the previous year given the Bill a public-spirited support, as calculated to raise the character and dignity of our medical examining system. Secondly, it gave occasion to the enemy to decry and to disparage the system of graduation in the Scotch universities, and to represent it as no better than that of the English corporations. Thirdly, it gave great impetus to the determination of English teachers to have an easy method of graduation for the benefit of London students and London schools. This determination found expression in Sir WILLIAM JENNER'S address. Our readers know how heartily we desiderate legislation that will put the medical schools of London into such relations with a living teaching university as to facilitate medical graduation for London students. But we fear that Sir WILLIAM JENNER'S views on this subject are open to grave objection. The President of the College sees, of course, what is only too patent, that the London students are lured to Edinburgh and other of the Scotch universities by their degree-granting powers. The regulations of the universities require residence for two years at least. The London University—a mere examining board—hitherto has had no pity for the best medical teachers thus deprived of their best students. Like too many of the alumni of this university, Sir WILLIAM seems hopeless of its having wisdom enough to submit to such changes as would be for the good of medical education in the largest city in the world. He is probably rather hopeless too, as well he may be, of the English Parliament within any reasonable period having either inclination or time to compel the University of London to come down from the clouds and make it what it was intended to be. Under these discouraging circumstances, Sir WILLIAM makes a suggestion that the two Colleges, in their conjoint form, might undertake an inquiry as to the best means of obtaining the favour to grant degrees. From the tenour of his language we should gather that he believed that the Colleges themselves might aspire to this high function and become degree-granting bodies. This seems to us to be an entirely inadequate suggestion. It is not in the nature of things that professional corporations should grant Degrees; and it would be a serious degradation of degrees and of their value if everyone passing the lowest qualifying examinations of the corporations were to become entitled to the highest and most coveted medical title. This would be levelling up with a vengeance. It would be to deal a deadly blow at the value of Degrees altogether, and to make distinction consist in not having them, or in having them and not using them. We cannot believe that such a step will ultimately have the approval of Sir WILLIAM JENNER or of the College of Physicians, which has always held high the distinction of graduation, and recognised that the conferring of degrees and of the titles attaching to them was the work of universities.

There are two questions which we should like Sir WILLIAM JENNER to consider, or the Conjoint Board to whom he would depute the inquiry concerning degrees for London students. First, is it to be believed that a degree from two London corporations would be considered equivalent in public value to those of ancient and well-ordered universities where all the Faculties exist, and lend lustre and *esprit de corps* to the whole body of graduates? Secondly, if the Corporations of London claim and receive the power to grant degrees, what is to hinder the Corporations of Edinburgh from doing the same? Obviously nothing. After this would come the deluge, and the whole system of graduation would be discredited. Men would cease to strive for that which had ceased to be an honour. We are not fearful of such a calamity, for whatever the faults of the existing universities, they have not yet so utterly lost influence in the State as not to be able to prevent such a blow at one of their chief functions. There is yet one more, but sufficient, objection to such a scheme as Sir WILLIAM JENNER seems to contemplate—namely, that it would give a false appearance of satisfying the deep and wide demand expressed for a true, complete, teaching University for London, in the ordinary and comprehensive sense of that word.

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THE Government Bill to amend the Laws relating to Lunatics has been printed, and although in many respects its provisions will need to be modified in passing through Committee, it is certainly a measure which must be accepted as embodying considerable and salutary reforms. The salient defects happily admit of amendment by very simple changes.

The most urgent of these is a shortening of the period during which the protection extended to persons placed in an asylum under "urgency certificates" is to be withheld. Practically there is little fault to find with the safeguards provided for the protection of ordinary cases which, after this Act comes into operation, will be submitted to the supervision of a County Court judge, a stipendiary magistrate, or a justice of the peace; instead of being rushed secretly into an asylum without any sort of check on the *bona fides* of the person making the "order." Henceforth orders will, in the regular way, be made by magistrates only. There is, however, a dangerous loophole left for wrong-doing by the adoption of the method of incarceration by "urgency certificates." In itself, this method, which has been borrowed from the Scotch system, is admirable, and will fulfil many useful purposes; but it would manifestly be destructive of the principle of the measure to permit a weak-minded or eccentric person to be put away in an asylum with a single medical certificate, and left in the midst of lunatics for seven days before a petition were presented to a magistrate. Yet this is the effect of the Bill as printed! Again, a report is to be made to the Commissioners a *month* after the admission of a patient to an asylum. Why a month? If a month, and then so much longer as may suit the convenience of the Commissioners in Lunacy, are allowed to elapse before the lunatic is visited, obviously great harm may be done. The *idea* of the Bill is to provide that in *all* cases of admission to an asylum there shall be a special visit to the new inmate within a reasonable time after his reception. This is an excellent measure, but it is absolutely necessary that the visit should be paid much more promptly than at the end of a month, *plus* so much longer time as may be implied by "as soon as conveniently may be." As the Bill is drawn, it may very well happen that two months or more will elapse before the visit which is to act as a safeguard is paid, and long before that time the new inmate may be hopelessly insane. In the case of a patient admitted on an "urgency certificate," it is, as we have said, imperative that the magistrate should interfere in less than seven days. A very little reflection must suffice to make it plain that the danger of wrong-doing will be rather increased than diminished under the proposed Act, unless the powers given under the urgency clause are very carefully guarded.

Speaking generally, the aims of the Bill are good, and not only well directed, but thoughtfully and carefully carried out. Too much, however, is left to the Commissioners, who are assumed to be immaculate, whereas it should be borne in mind by the Legislature that the need for reform has to a large extent arisen out of the careless and perfunctory manner in which the Commissioners have hitherto discharged their duties. If the Commission had not been largely composed of men trained in the evil ways of the asylum-system, and very little in earnest for the interests of the insane, the laws already in existence would have sufficed for the protection of both the sane and the insane. Laws are made for those who either themselves do amiss, or by their error or apathy allow others to offend against the welfare of society. It is indispensable that the most stringent precautions should be now taken to keep the Commissioners up to their work, and to compel them to discharge the obligations of their office in no perfunctory fashion. Let those who doubt this only reflect on the way in which the provision for the scrutiny of certificates by the Commissioners has been carried out. As a matter of fact, it has been the boast of the Chairman of the Commission that extremely few certificates have been found to be defective. What does this mean? Simply and plainly that the Commissioners have not troubled themselves to look beneath the merest surface technicalities. For example, if in filling in a form the certifying person chanced to omit a statement in some blank space of the vocation of the alleged lunatic, he would be called to order; but if he filled another blank space with the veriest rubbish in the way of evidences of insanity, the Commissioners cared nothing for that palpable fact. Unless something be done to make these gentlemen understand that they are to do more than mere clerks' work, the provisions of the Act will fall flat. Let anyone who knows the working of the Commissioners' office at present ask himself what is likely to be the practical result of a provision such as this: "In the case of a private patient in an asylum, the Commissioners, after receiving the report [that is, the report to be sent to them by the medical officer of an asylum at the expiration of one calendar month after the reception of a private patient], shall either make arrangements for a visit being paid, *as soon as conveniently may be*, to the patient therein named by one or more of the Commissioners, or," &c. Beyond question, in as many cases as possible the Commissioners will content themselves by referring the matter to the committee of visitors of the asylum, as the Act allows, and for the rest, "as soon as conveniently may be" will mean anything from a month to three months. Probably it will amount to this, that at the next routine official visit to the asylum the Commissioners who chance to go will be charged to inquire for the patient named in the report, and his or her name will perhaps have two ticks on the list instead of one. If any good is to be done by the passing of this Bill, failure through official neglect must be guarded against at every point. Nothing can safely be left to the Commissioners in Lunacy, and unfortunately much has been left to them, with the gravest peril of reducing the Act to the level of a new incumbrance of the statute book. The provisions throughout are far too permissory in their character. They should order where they now simply allow. This is especially necessary in all that relates to the main purpose—namely, the protection of the alleged insane.

The effect of the measure as regards the gradual superceding of the private-asylum system is, we think, likely to be satisfactory. The Secretary of State can enforce the provision of sufficient accommodation for both pauper and non-pauper cases; and the interest of local financiers will be to receive private patients into public asylums because the profits made in this way can be applied to the relief of the rates by defraying other costs of the asylum. This appeal to the commercial instinct may doubtless be trusted to produce sound fruit. It is much to be regretted that the care of the "sane or insane" cannot be placed on an equally practical footing with respect to the discrimination between suitable or unsuitable cases. Unfortunately, when the committees of public asylums become *de facto* themselves private asylum keepers, making a profit out of every

paying case they can accommodate, there will be less rather than greater reason to trust to the security their disinterested vigilance is supposed to supply, and to which the new measure attaches very considerable importance. On the whole, as we have said, the Bill is a good one, but it will need to be amended in many points to make it consistent with itself.

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IN another column will be found some remarks by Dr. WILKS upon the efficacy of arsenic as a remedy for certain obscure cases of anæmia and atrophy. Few are better qualified than Dr. WILKS to advocate a remedy for such conditions, which have been often made the theme of his suggestive essays; nor do we think his apology is needed for bringing the subject under the notice of the profession. For no one will accuse Dr. WILKS of over-estimating the value of any drug; he is, if he will allow us to say so, far too much imbued with scientific caution to lavish undeserved credit on any pharmacopœial preparation. It is this fact which makes his testimony of so much value, confirming so strikingly the opinion that is now tolerably widely established as to the importance of arsenic in therapeutics. Perhaps the most striking examples of its efficacy are in those cases of idiopathic anæmia in adults which, owing to their mostly fatal progressive course, were, as Dr. WILKS somewhat cynically reminds us styled "pernicious;" cases of blood-impoverishment, which appear to depend upon some defect in the process of blood-formation, but the precise etiology of which still remains shrouded in obscurity. The testimony of Dr. WILKS on this point is borne out by the experience of many physicians; amongst the most recent being Dr. WARFINGE of Stockholm, who reported several cases of remarkably rapid arrest of the downward progress of the disease, and even of recovery, under the use of arsenic. All such cases should, however, be subjected to prolonged supervision, as it is notorious that relapses are prone to occur. The same remedy has been also successfully employed in an even more definite cachexia—viz., Hodgkin's disease—where the internal administration of arsenic has been supplemented by its injection into the hyperplastic lymphatic glands with, according to WINIWARTER, astonishing result.

The list of conditions, exclusive of cutaneous and nerve affections, in which arsenic has been found empirically useful, is a very long one, and to it must be added such cases of general atrophy or marasmus, to which Dr. WILKS now draws attention. But, as is so often the case, the fact of a remedy being useful is admitted and recognised long before any satisfactory rational explanation of its mode of action is arrived at. This is pre-eminently the case with arsenic; for although experimentation has shown that it has most powerful effects upon tissue metabolism, there is a lack of harmony in results that prevents an exact conclusion as to the precise direction in which that change occurs. Thus, it has been asserted by some to promote oxidation, by others to lessen it; by some to act destructively upon the blood-globules, by others to reinforce them; some find an increased excretion of urea under its use, others a diminution of this product. One view of its mode of action is that its compounds readily take up and part with the oxygen they contain when in contact with protoplasmic molecules, arsenious acid being oxidised in the blood, and the resulting arsenic acid being reduced by such contact; in other words, that it acts vicariously for hæmoglobin. Hence its value in conditions where that essential agent to metabolic processes is diminished or in abeyance.

Dr. WILKS declines to speculate upon the *modus operandi* of the drug, and we will not rush in where so skilled an observer fears to tread, for the ground is so uncertain, and knowledge of the intimate processes of nutrition in health as yet so incomplete, that it is not possible to advance more than theoretical explanations of the reason of its efficacy. We must be content with proclaiming the fact that in arsenic the practitioner possesses one of the most valuable of drugs, of especial value in cases of profound nutritional disorder, which seem to depend, not upon the derangement of any single organ, or upon the extension of such morbid processes as tubercle or cancer, that sap the vitality of the organism, but upon some as yet hidden and mysterious disturbance of the normal dynamics of nutrition, in which both blood and tissue seem everywhere to be at fault. Until physiological and pathological research shall have elucidated more clearly these intimate processes, it is idle to speculate on the action upon them of therapeutic agents.

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THE *Morning Post* has discovered a new *opprobrium medicinæ*. There is something fine in the dogmatism with which our contemporary settles that Lord CAIRNS a week before his death was a strong healthy man, and that the responsibility for his death from a "mere chill" lies at the door of "medical science." The sentence in which the conviction of the writer is expressed must not be "let die."

"Now we have no hesitation in saying that, notwithstanding the boasted progress of late years in medical science, it is simply an *opprobrium medicinæ* when a man full of health and vigour is sent to the grave through the operation of a disease which every physician would admit is curable if taken in time and properly treated."

This absence of hesitation is a quality in public writers which is very much admired by a large class of readers, and we do not like to say a word that would qualify their enjoyment of the deliverance of our contemporary, that such deaths as Lord CAIRNS' are a disgrace to medicine, and due entirely to the abandonment of the good old practice of "drawing blood in large quantities from the patient." Unfortunately our contemporary's authority, though great in questions of fashion, does not extend to the fashions of medical practice, and we find his argument vulnerable at every point. So far from knowing so much more than others, and being entitled to rate the degenerate representatives of medicine, he betrays a striking ignorance of what all the world but he himself knew well. He assumes that Lord CAIRNS was a man of strong health and vigour, whereas it is notorious that he was not so, and his residence at Bournemouth was determined by the very delicacy of his health. He further assumes that the deceased nobleman was perfectly well up to the time of a certain shower to which he was exposed, forgetting that, like the rest of his fellow-countrymen, he had been continuously exposed to two months of biting east wind, without the power of resistance that many have. Then our contemporary holds "medical science" responsible for Lord CAIRNS' death, whereas it is notorious that the noble and good earl, with all his acumen, did not appreciate what the

medical profession would understand by medical science, but preferred to be treated by the representatives of a medical system which is ignored by every University of Europe and by scientific men generally, and the chief representatives of which in England have fundamentally changed their ground. But where our contemporary has gone farthest wrong is in supposing that there is an alarming increase in the frequency of such deaths as that of Lord CAIRNS as compared with the palmy days of bloodletting. No mistake could be greater. The mortality of such cases has been immensely reduced by improvements in modern treatment, and especially by the leaving in the veins of the patient the large quantities of blood which used to be "drawn," as our new censor says. One physician alone, the late Dr. J. HUGHES BENNETT, has recorded 105 cases of *uncomplicated* inflammation of the lungs *without one death*, though many of the cases were severe, involving the whole of one lung in fifteen and both portions of lungs in twenty-six cases. His system of treatment, now generally followed, is described by himself as "treatment by restoratives, directed to further the natural progress of the disease and supporting the vital strength." He entirely avoided "drawing" large quantities of blood, under which the mortality was certainly infinitely greater. We cannot answer for the treatment pursued in Lord CAIRNS' case. It is quite possible, in the dilapidated and demoralised state of homœopathy, that it did not differ from that practised now by most sensible physicians. The fatal result may have been due to the occurrence of a sharp pulmonary congestion or a pneumonia in a constitution by no means vigorous or healthy, and worn by the labours of an anxious profession and position. But one thing we will venture to say without hesitation, that the omission of phlebotomy was not a subject for censure, and that our contemporary will have to find other cases than that of Lord CAIRNS on which to revive a practice so questionable as the "fashion" over the disappearance of which he seems to sigh, and which, like many other fashions, is generally more honoured in the breach than in the observance.

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THE lecture on the Sanitary Condition of our Homeless and Nomadic Populations, delivered by Dr. RICHARDSON on Saturday before the Association of Sanitary Inspectors, has struck a chord which has caught the attention of the people in a very remarkable way. It is one of the often-expressed sayings of the author of the lecture that many of his efforts which have gained most public favour have been those which have cost him least trouble and the smallest amount of preparation. The lecture opened with an intimation that the services of the sanitary inspectors might be extended with good purpose and effect to the inspection, under skilled direction, of the condition of the people who live without any fixed home. The people thus named were then divided into three classes. The first, the vagrant class, who have no home of any kind, who sleep anywhere, and get food anyhow. The second, the itinerant trade and showman class, who wander about the country in vans, using the van as the living and sleeping house, as well as the storehouse. The third, the pure nomadic class, who still live altogether under canvas—tent-dwellers proper, or gipsies. The conditions of health of these three classes were then compared and contrasted *inter se*, and, by inference, with the members of the ordinary community. To the vagrants a life of a truly unhappy and worthless kind was accorded, but it was indicated that with all their misery they and theirs were less subjected to the decimating zymotic diseases than the members of the industrious populations aggregated in large cities and towns. It was further pointed out as a singular fact that these vagrants wandering to and fro amongst the people, wearing the cast-off and often infected clothing of the people, and occupying common lodging-houses in which the most simple hygienic rules prevail, rarely carry about with them any of the contagious diseases, and rarely suffer from them. The same rule was to a certain extent true in respect to the people who travel and live in the vans, but these are much more subjected to other diseases, induced even in the midst of nature, "under the canopy itself," when they begin to shut themselves and their families up "in a travelling experimental room." They then become anæmic and scrofulous, and are affected with consumption of the lungs from a rude and unscientific, though practical, synthesis of that formidable destroyer. As to the true nomads or gipsies who continue still to live in tents, their fate is indeed singular, in so far as the lecturer's observation extended to them, observation which seems to have won the special attention of hearers and readers. Dr. RICHARDSON said that in his early professional life, when he was associated in practice with the late well-known Dr. ROBERT WILLIS of Barnes, he had under his care for some months, on Barnes-common, a gipsy lad living in a tent, who had sustained an injury to the spine, and that during this long attendance he had gathered a number of facts relative to the gipsy life, and had learned a little of the language of this singular Indian trail, some words and sentences of which he still remembered and explained. From this and later sources of information he came to the conclusion that the gipsies, perhaps comparatively short-lived—although there were exceptions to this rule,—are remarkably free, so long as they remain in the tent, from the spreading diseases of the community at large. They seemed in this primitive condition to know nothing of small-pox, though little protected by vaccination, and he had never met with one of them pitted with small-pox. In 1850-51 the gipsies on Barnes-common were surrounded with cases of scarlet fever in the neighbouring places, but they all escaped, although they took no precautions, and in fact were absolutely ignorant or indifferent about the matter. More curious still was the statement of the lecturer that he had failed to find a gipsy man, woman, or child in the pure nomadic state who showed evidence of syphilis, either in its primary, secondary, or tertiary stages, and he referred to the perfect condition of their teeth as a corroboration of the truth of this noteworthy observation. When the nomadic gipsy changed his mode of life, when he settled in cities and towns, and so came "under the influences of a higher and more cultivated civilisation," then, doing at Rome as Rome does, he gets what Rome gets. But in his primitive state he seems to escape this, the most corrupting scourge of the human family in its more advanced social life. Altogether, the lessons derivable from the lecture were that poverty of itself, unless pushed to absolute famine, had nothing to do

with the occurrence of the zymotic diseases; that fresh air is the one mighty disinfectant; and that luxury and density of population are the two bad spirits that conjure up the great physical evils of humanity, and necessitate the existence of an army of protectors, of which our profession is the body and soul, against those evils. That the views and suggestions offered by Dr. RICHARDSON in his lecture are to be taken with all proper qualifying experience, to be sought out in the future, is what he himself anxiously asked for, and which we therefore may fairly urge. He had, he said, merely afforded a nucleus for further information, and he enlisted the services of the sanitary inspectors of the kingdom to report to him on a series of questions which he has drawn up for their and his own future guidance. We feel sure that the members of the profession will be glad to take part in a labour which, commenced by one of their own body, deserves to be supported generally, as affecting importantly the health and education of the nation at large.

# Annotations.

"Ne quid nimis."

## PROFESSOR MACLEAN OF NETLEY.

A FAREWELL dinner was given at the Medical Staff Mess, Netley, on the 31st ult., to Professor Maclean, C.B., whose official connexion with the Army Medical School terminated on that day. About fifty medical officers and guests were present at the entertainment. The Director-General of the Army Medical Department, who came from London to attend the dinner, proposed the toast of the evening in a speech characterised by much feeling and ability, and in the course of it gave a review of the long and valuable services of Dr. Maclean, not only at the Army Medical School, but also while serving under the Indian Government in the Presidency of Madras, where the accidents of service had caused them to be frequently associated. Professor Maclean, who replied with much emotion, said it was a source of the greatest satisfaction to him that, now he was quitting active employment in the Army Medical Service, he could feel he was leaving the department in a more efficient state of organisation for carrying out the important duties with which it is charged, in time of peace as well as in time of war, than it had ever had in former years; and in taking leave of his colleagues and brother officers he particularly congratulated them that the professorship he had held was now passing into the hands of an officer who had had such varied and extensive experience in tropical disease, and who had won for himself so distinguished a name in India, as Dr. David Boyes Smith.

## THE PORT OF LONDON.

ACCORDING to the report by Dr. Collingridge for the second half of 1884, 12,111 visits of inspection were made to vessels within the limits of the port sanitary district of London. Attention is drawn in the report to the dangerous practice of bringing home in ships the clothing and effects of persons who have died of infectious diseases abroad; and during 1884 the clothing of cholera victims was included amongst these articles. Unless there is the most distinct evidence that such articles cannot have been exposed to infection, the practice of the port officers is to burn them and to recoup the owners. The cholera epidemic in Europe is entered into in some detail; and it is shown that considerable arrangements had been made for dealing with the disease had it made its way into the port. In connexion with the prevalence of infectious diseases, Dr. Collingridge calls attention to a curious anomaly in port sanitary administration. At the present time all bills of health are signed by the Customs officers, who have no proper means of judging of the real health of ports, and who are hence practically limited to the ordinary channels of information. Since infectious cases within ports are reported to the officers of health, it is obvious that they, and not the Customs officers, should sign the documents in question. The present arrangement is, of course, a remnant of a system which was antecedent to the universal appointment of officers of health in ports, but the time is approaching when it should cease. The new hospital on the banks of the Thames below Gravesend has been of great service in the isolation and treatment of cases of infectious diseases, and with a view of adding to its efficiency a covered boat fitted with a cabin for the comfortable conveyance of two persons in a recumbent position has been provided for the purpose of removing patients from ships. The polluted state of the Thames is once more adverted to. Last August the river was more foul than it had ever been before the cleansing of the upper reaches having been carried out at the expense of the lower, and the result was that attacks of vomiting and diarrhœa occurred in passengers coming up the river in consequence of the effluvia. The so-called "deodorisation" carried out by the Metropolitan Board of Works is stated to have been quite useless beyond causing a slight smell of chlorine in the neighbourhood of the outfalls. The cool weather and the rain which followed at the end of August alone led to a temporary abatement of this gigantic metropolitan nuisance. It is to be hoped that measures will before long be undertaken to remedy a state of affairs which, resulting as it does from the discharge of sewage in its crude state into the river, has been declared by the Royal Commission to be "neither necessary nor justifiable."

## A NEW ANTISEPTIC.

SOME articles have appeared in recent numbers of the *Boletin Farmacéutico* of Barcelona, calling attention to a drug which seems to be well known in Spain, but which, not having been in the writer's opinion prescribed with due regard to its physiological properties, has disappointed many, and so has fallen into undeserved disrepute. The drug referred to is helenina, the active principle of Inula helenium (elecampane). It was formerly used for itch and herpes, also as an anthelmintic. It has now been found to have powerful antiseptic properties. Dr. Korab found that fifty centigrammes were sufficient to entirely arrest putrefaction in five litres of urine—i.e., 1 in 10,000 parts. The writer of the articles has also made some experiments. A slice of veal sprinkled with a solution of 25 centigrammes of helenina in 2 grammes of alcohol, and kept at a temperature of 28° C., remained perfectly sweet for ten days, by which time it was completely dried up. An egg beaten up with 300 grammes of water, to which was added 30 centigrammes (about five grains) of helenina dissolved in two grammes of alcohol, remained unchanged at the temperature of 28° C. for six days. Another egg similarly beaten up without the drug, and kept at the temperature mentioned, rapidly decomposed, and in twenty hours emitted a strong odour of sulphide of hydrogen; to this a solution of 50 centigrammes of helenina was added, and in a few minutes the offensive odour had disappeared, and the mixture underwent no further change. Similar experiments with urine, meat, and beaten-up eggs were made with carbolic acid, boracic acid, and salicylic acid, instead of helenina; but much larger proportions of these substances were required to prevent putrefaction, and none of them were capable of arresting commencing putrefaction

of the egg, as helenina had done. Korab found that a few drops of a solution of helenina immediately killed the organisms in ordinary infusions, and also in cultivations of the tubercle bacillus. While the writer was working with helenina in his laboratory, he noticed that the bad odours usually present in the vicinity were replaced by the aromatic smell of the drug, due to the washings thrown away. He also noticed that insects, which were commonly very numerous, were at that time absent; even the mosquitoes were kept away from the whole house during the months in which they specially abound. The drug has proved most valuable in surgery as an antiseptic when carbolic acid and other agents had failed. It has been successfully given internally in malarial fevers, tubercular, infantile, and catarrhal diarrhœa; and it is expected to prove an excellent substitute for carbolic acid in the Listerian system of aseptic surgery. The dose is about a third of a grain in pill or mucilage, and the price about a penny a grain.

## THE FAVERSHAM JOINT HOSPITAL BOARD.

COMBINATION of sanitary authorities for the purpose of providing infectious diseases hospitals has so many advantages that the system has been largely favoured by the Local Government Board. The scheme involves but a comparatively small increase of cost over a hospital provided by a single authority, for one site, one boundary wall, one set of buildings for ambulance, laundry, disinfecting, and mortuary purposes suffice for two authorities, just as it does for one only; and even as regards the ward-pavilions, only some increase in the number of beds, and not of the buildings, is, as a rule, needed. Some time since, on the application of the urban and rural authorities of Faversham, and after public inquiry at which all parties seemed unanimous, the Local Government Board issued a provisional order forming the two authorities into a joint hospital board. From that moment, however, dissensions appear to have sprung up; disputes occurred as to the site and the character of the buildings, and at last the joint board suspended its meetings, having in the first instance applied to the central authority to be dissolved. But the board having been formed with the approval of Parliament for a definite purpose, the Local Government Board decline to sanction the dissolution except on the definite understanding that each authority will singly perform its duty in the matter of providing means of isolation. No such guarantee appears to be forthcoming, and the whole matter is at a deadlock. This is to be regretted. Both authorities have a considerable population among the labouring classes, who, when infectious disease appears in their homes, have no proper means of accommodation for the sick, and are utterly without such means as would suffice to stay the spread of infection. The elections which are about to take place as to local affairs may perhaps set the matter again on a proper footing, and thus the two authorities may be spared from acting without proper judgment in regard to a step which is of considerable importance to the health of their respective districts.

## TRANSFUSION OF BLOOD.

THE public mind has been much astonished and bewildered during the past few weeks by the reports, through the general press, of certain experiments on transfusion of blood said to have been carried out at Denver, Colorado. The popular mind has been astonished and bewildered many times before now on the subject of transfusing restoratives into the circulation of men and animals. The operation starts, indeed, in mystery. Æson, the father of Jason of the Golden Fleece, becoming infirm, Medea, after drawing the blood from his veins, refills them with a potent fluid, and the old man, so runs the fable, rejuvenates. Libavius of Halle, in the early part of the seventeenth century, improves on this fable by suggesting the actual transfusion of blood. Christopher Wren, in the eighteenth century, gives the idea more distinct form; and Richard Lower, Edmund King, and Denis actually bring it into practice, with such effect that the world, startled by the first results and filled with admiring wonder, soon turns round, in disappointment at failure, and lets the Pope prohibit the operation in all parts where his mandate was law. Over and over again the wonder has, nevertheless, revived. Early in this century, Professor Harwood of Cambridge revivified a pointer that had been bled, as it seemed, to death by transfusing into it the blood from a sheep. Later on in the century Dr. Blundell made some remarkable experiments precisely similar in character, and now we have the same retold in a new dress, either by repetition of mere narrative or by repetition of experiment—which it is difficult as yet to say. Of the report going the round of the press it is quite impossible, at present, to speak with any certainty. The account may be nothing more than a piece of clever writing based on an imperfect knowledge of previous researches. It may be the account of some experiments similar to those we have described, but reported with more of enthusiasm than accuracy. We cannot tell. All we can say is that the absence of technical mode of description, some errors of detail, and the absence of reference to all previous research on the subject, together with the notice of many proceedings which according to our present knowledge would destroy the value of transfusion as a means of restoring suspended life, make us most cautious in accepting any part of the statement until it is corroborated by other and more trustworthy evidence.

## FRUIT AS AN ARTICLE OF DAILY DIET.

ONE of the most salutary tendencies of domestic management in our day is that which aims at assigning to fruit a favoured place in our ordinary diet. The nutrient value of such food, in virtue of its component starchy and saccharine materials, is generally admitted; and while these substances cannot be said to equal in accumulated force the more solid ingredients of meat and animal fat, they are similarly useful in their own degree, and have, moreover, the advantage of greater digestibility. Their conversion within the tissues is also attended with less friction and pressure on the constructive machinery. The locally stimulant action of many subacid fruits on the mucous membrane deserves mention. Its control of a too active peptic secretion, and its influence of attraction exercised upon the alkaline and aperient intestinal juice, are points of more than superficial importance. To this action further effects, which aid the maintenance of a pure and vigorous circulation, are indirectly due. Thus it follows, on the simplest principles of physiology, that other essential organs, such as the skin and kidneys, are relieved by the transference of part of their excretory function to the bowel, and act with greater ease, the general vascular system is lightened by this regulating drain, and its faculty of absorbing the waste products of food and work is encouraged in proportion. Almost all persons in fairly normal health may partake of sound and ripe fruit in greater or less amount. Except in certain cases, indeed, there is practically no exact limit to its consumption under these circumstances. Among such exceptions may be noted the gouty and rheumatic diatheses. A tendency to diarrhœa or a dysenteric history obviously forbids the free or frequent use of fruit. Saccharine diabetes, or nervous conditions in which it is apt to appear, are similarly antagonistic—at all events where any but the non-amyloid fruits, such as nuts, are considered. Dyspeptic stomachs, on the other hand, are usually benefited

by a moderate allowance of this light and stimulating fare. It must be remembered, moreover, that every fruit is not equally wholesome, let the digestion be as powerful as it may. Nuts, for example, consisting as they do, for the most part, of condensed albuminoid and fatty matters, cannot compare in acceptance, either by the palate or the stomach, with other more succulent kinds, even though they contain in the same bulk a far greater amount of nutriment. A little of such fruit is enough for digestion, and that little is best cooked. Nevertheless, if we take fruit as a whole, ripe and sound of course, and consider its variety, its lightness and nourishing properties, whether eaten alone or with other food, and its cheap abundance, we cannot hesitate to add our voice in support of its just claims on public attention. In former articles we have shown why vegetable produce of all kinds should enter largely into the food of children. Well-chosen fruits are consequently for them as safe and beneficial as agreeable.

## THE GENESIS OF CANCER.

A MARKED increase in the death-rate from cancer during the latter part of the present century has for some years occupied the minds of several well-known pathologists in endeavours to reveal its cause. There is a pretty general agreement with regard to this disease that it is prone to arise out of prior morbid states which do not appear to be directly or necessarily related to it. It is evolved as a successor to innocent tumours, or in the track of an old inflammatory lesion. It rises apparently *de novo* out of mere senility or exhaustion of tissue, its permanently rudimentary type representing the best efforts of wearied nature to make good the daily wear of more perfect structures. On the other hand, cases occur in which, without impairment in any visible degree of vital power, the energy of some local irritant appears to master so completely the normal process of growth as to maintain its elements in the exuberant imperfection of the malignant tumour. Manifestly the same irritant acting on weak tissues is still more likely to work out its pernicious consequences. If we admit, therefore, as we consistently may, that tissue exhaustion, the result of toil, anxiety, or privation, and whether inherited or directly induced, affords a sufficient basis for the development of cancer, we need not look far into the history of our laborious age to find an explanation of a rise in its death-rate which at first may seem to be anomalous.

## WELL WATER AT ENFIELD.

A CURIOUS conflict of opinion has occurred in connexion with certain proceedings having for their object the closure of a surface well in the district of the Local Board of Enfield. Dr. Ridge, the medical officer of health, found the water suspicious from a chemical point of view, and still more suspicious because of the nature of the surroundings of the well. On this, proceedings were taken to secure the closure of the well; but the owner in the meantime procured an analysis by Dr. Tidy of water which professed to be that of the suspected well and of another well mixed together. The chemical results were all that could be wished, and the magistrates dismissed the case. The owner was then told that fresh samples would be taken, and this having been done, the analytical results were found not only to differ from the preceding ones, but, curiously enough, the water exhibited the presence of iron. In view of this, further samples were taken in the presence of several people, and this without any notice to the owner until the arrival of those who were prepared to take the water away with them. This time the analyst found chlorine equal in quantity to 18·45 grains of common salt in every gallon, 17·5 grains of nitric acid as nitrates, and no iron. The absence of iron in this sample points to the intentional addition of that substance with a view to a temporary purification of the water by oxidising or precipitating organic matter. The well in question is 16 feet deep; it lies in a district which has sewers with "open joints," and which have, in consequence, fouled the gravelly soil in which the well is sunk. Several of the house and closet drains were also recently found to be leaking through such joints. These circumstances alone amply suffice for the condemnation of the water-supply, and it is a matter of wonder how people can endeavour to show by chemical analysis that a water derived from a soil thus subject to the constant risk of pollution is really fit for domestic purposes. The freedom of individual samples from any indication of the surrounding contamination is a matter that should have no weight beside the fact that the source of the supply is one subject to constant risk of pollution. In this case, however, chemistry also came to the aid of the medical officer of health when the sample dealt with was collected under circumstances which were above suspicion.

## CHILDREN IN WORKHOUSES.

THE care, treatment, and nursing of children in workhouses is a subject which at the present time calls for more attention at the hands of Local Government Board inspectors and the philanthropic public. After due allowance for the low physical standard of such children, and for their congenital tendency to disease, the excess of mortality that prevails among them is a subject that urgently demands inquiry and action. Inquiry, because Local Government Reports are silent upon the subject; and action, because much of this excess of mortality is assuredly preventable. It is only now and then that facts come to light helping us to call attention to the health condition of these unfortunate children; this makes it all the more necessary not to miss such opportunities. It appears from the last two weekly returns of the Registrar-General, that during the fortnight ending on the 4th inst. no fewer than fifteen children, most of them illegitimate, died from measles in the Camberwell Workhouse, Gordon-road, Peckham. It will be interesting to learn the number of infants in this workhouse, the number attacked by measles, and also whether this startling mortality will be the subject of a Local Government Board inquiry, with a view to ascertaining the kind of treatment and nursing which workhouse children receive on the occasion of such an outbreak of epidemic disease as that now prevailing in the Camberwell Workhouse.

## MAD DOGS AT LARGE.

THE inhabitants of Sheffield seem to have been lately thrown into a state of consternation owing to mad dogs wandering in the streets. It is reported that special precautions have been taken by the police, and many dogs destroyed. These precautions are praiseworthy in themselves, but we doubt if they will prevent a recurrence of the danger. There can be no doubt that every dog roving at large, unattended, and "without visible means of subsistence," should be arrested as a rogue and vagabond, but the wholesale destruction of these waifs and strays seems unnecessarily severe. What we would suggest is that the number of places of refuge, or "dogs' homes," be extended. Greater facilities would then be given for watching suspicious characters, and for owners to claim their lost property. But these are cases which require peremptory treatment. If a dog is mad, it is worse than valueless to its possessor, whilst it is dangerous to every living being with whom it comes in contact. This might afford some reason, perhaps, why policemen should be armed with revolvers. It is not always easy, however, for the laity to tell whether a dog is the subject

of rabies, or merely gifted with vicious propensities. The necessary knowledge too often only comes of experience, and the vagrant cur runs fancy free until it has fleshed its envenomed teeth in some hapless passer-by. Save in a few isolated cases, where canine madness first shows itself in a fortuitous and unprovoked outburst of hostility towards an unsuspecting individual, the premonitory symptoms are sufficiently marked to arouse suspicion and point to danger. Restlessness, loss of appetite, and perversion of the affections are amongst the number. It is not feasible to educate the public in these matters by practical demonstration, but much may be done by way of warning and advice. A code of instructions might be drawn up and circulated by the local authorities, which would be of incalculable value to the community. It may be contended that such a procedure would arouse needless alarm, and condemn many an unoffending dog to a premature death; but against such an objection is the certainty that a number of human lives would be spared the perils of a terrible disease.

## INTERNATIONAL HEALTH EXHIBITION.

DR. FELICE SANTINI, medical officer of health of the Royal Italian Navy, who was appointed by the Italian Government commissioner to the International Health Exhibition, has just published his report to the municipality of Rome.[1] He draws special attention to the excellent organisation of the Metropolitan Asylums Board, and the work done by them and the St. John Ambulance Association, and gives illustrations of the various ambulance carriages and stretchers used by these associations, together with a map showing the hospitals in connexion with the Metropolitan Asylums Board and diagrams of the hospital ships *Atlas*, *Endymion*, and *Castalia*, which are moored in the Thames. Dr. Santini was much impressed with the excellent idea of forming a hygienic library in connexion with the Exhibition, and brings to the notice of his Government and the municipality of Rome the services of Mr. Carl A. Thimm, the librarian, who so efficiently arranged and catalogued the voluminous publications contributed by Italy.

## VOLUNTEER MEDICAL STAFF CORPS.

THIS corps, although enrolled only on April 1st, put in an appearance at the Brighton Review. Two companies, about fifty strong each, paraded at Wellington Barracks on Good Friday morning in full marching order, and, taking train at Victoria, accompanied the marching columns. No. 1 Bearer Company, under the command of Surgeon-Major Cantlie and Acting Surgeons Leech, Fletcher, and Willett, accompanied No. 7 column, under the command of Col. Sir Lloyd-Lindsay, V.C., and billeted at Burgess-hill. No. 2 Bearer Company, under the command of Surgeon-Major Norton and Acting Surgeons Huzzey and Raw, accompanied No. 2 marching column, and billeted at Newick. On Saturday the companies followed the troops over the downs, and had some rough work with the waggons. The ambulance waggons of No. 1 Bearer Company were blocked for three hours by a transport waggon, which had broken down on a narrow road over the hill. The bearers carried the stretchers over hill and dale for four miles to keep touch with the troops, and only by a forced march were they able to return to pick up their waggons and join the troops in the march into Brighton. No. 2 Bearer Company had to take the horses out and pull the waggons up the downs. At the headquarters of the corps at Brighton a temporary hospital of eight beds was opened, and as many as fifty-three patients were treated between Saturday night and Monday morning. The appearance of the new corps at the march past on Monday was the subject of much congratulation and cheering. The Duke of Cambridge, after the march past, rode up to the head of the column and complimented the corps on its appearance and efficiency. Surgeon Cross, Grenadier Guards, acted as commanding officer, and Surgeon Pearse as his staff officer. Lieutenant McLure acted as adjutant during the march. On the day of enrolment of the Volunteer Medical Staff Corps, an inauguration service was held at the Chapel Royal, Savoy, by the Rev. R. Westhorpe, Warden of Charing-cross Hospital and Chaplain of the Corps. About 180 attended.

## THE METROPOLITAN BOARD OF WORKS AS A THEATRE LICENSING AUTHORITY.

THE Metropolitan Board of Works has politely asked the Lord Chamberlain whether he does not think it would make a better licensing authority than he has proved himself, and offered, "if his lordship agrees with this view," to take over the duty. We shall be curious to hear what the Lord Chamberlain thinks of this proposal. If he is wise he will hasten to wash his hands of the business. Meanwhile, will the Metropolitan Board of Works do the work better? And how about the licensing of stage plays? Does the Board propose to take that over also?

## REPORT OF THE BERLIN HYGIENIC EXHIBITION.

WE have received a copy of the introduction to the first volume of the Report upon the German Health Exhibition, held at Berlin in 1883. On the close of the exhibition the task of editing this Report, which should survey the whole nature and scope of the exhibition, was placed in the hands of Dr. Paul Börner, who has prefixed to it an introduction detailing the steps taken to promote the exhibition, which was completed and ready for opening when destroyed by fire in 1882. Within twelve months the building was reconstructed on an improved plan; and a description of the building is given, with a brief history of the exhibition from its opening to its close. From the table of contents to the volume it is seen that the descriptive articles of each department are contributed by experts; and the work should therefore have a special and permanent value.

## SHOULD AN INQUEST BE HELD?

MR. H. GOTOBED, the Cambridge borough coroner, recently held an inquest on a woman who had died suddenly of heart disease, and gave as his reason for so doing that about two years ago Lord Chancellor Selborne admonished a coroner for neglecting to institute an inquiry into the cause of death of a person found dead in bed. Lord Chief Justice Jervis held that, unless there was reasonable ground of suspicion that the person came to his death by violent and unnatural means, there was no occasion for the interference of the coroner. On the strength of the report of the recent inquest, we fail to see the discrepancy between the legal authorities cited by Mr. Gotobed. A person being found dead in bed, the presumption is that death arose from natural causes; but it would never do to grant a certificate on such wholly insufficient grounds. If, on the other hand, a person was known to have suffered from heart disease, and was subsequently seen to fall down in a fatal swoon, this, together with the circumstantial evidence, might warrant the coroner's decision not to order an official inquiry. At the same time, we contend it is highly desirable that the exact cause of death should, where possible, be determined in every case. Anything short of this obviously allows of mistakes, and possibly in some instances leads to

[1] L'Igiene Pubblica e Privata e la Didattica alla Esposizione Internazionale d'Igiene in Londra, 1884. Rapporto all'onorevole Municipio di Roma, del Dottor Felice Santini. Roma: Fratelli Bencini. 1885.

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## PERFORATING ULCER OF THE HAND.

THOUGH perforating ulcers occurring in the course of tabes dorsalis have their usual seat in the foot, there seems no reason why the hand should not be similarly affected. M. Terrillon showed a case of perforating ulcer of the palm of the hand at a recent meeting of the Société de Chirurgie. The ulcer was situate at the junction of the ring finger with the palm. The patient was a porter, and the subject of tabes dorsalis. M. Charcot did not hesitate to regard the ulcer as of dystrophic origin; pains and tinglings were experienced by the patient along the course of the ulnar nerve. A zone of anæsthesia was detected all round the ulcer. M. Nicaise inclined to the opinion that the ulcer was merely a corn which had become fissured, for the epidermis and cutis were thickened, whereas in perforating ulcers the cutis is thinned and even perforated.

## ANTHRAX IN BERMONDSEY.

FROM time to time during the past few years cases of fatal anthrax have been reported at Guy's Hospital, arising in connexion with the Bermondsey tanneries. The most recent case occurred last week. The subject was a labourer, aged thirty-eight, employed in handling hides at a wharfinger's. Less than four days before his death he complained of feeling sick, and noticed a small pimple on the side of the neck; and the next day he presented himself at the hospital with well-marked symptoms of malignant pustule. At the inquest Mr. Langham, the coroner, drew public attention to the great importance of persons infected with the poison making early application for hospital treatment. The verdict of the jury, "Natural death from blood-poisoning," seems to us to have been scarcely sufficient; for it cannot be too widely known that the disease contracted from these infected hides is a definite and specific affection, and that every precaution should be taken to protect workmen against contamination.

## EXPERIMENTS ON SOLDIERS' RATIONS.

EXPERIMENTS are being made in Munich, Mayence, Munster, and elsewhere, with compa es specially formed of the strong men of different regiments. The men selected are obliged to submit for a fortnight to a strict campaigning diet, and during this period have to go through field exercises and route-marching for six hours daily in full marching order. Before and after every march out each man is carefully weighed. He receives daily a regulated quantity of a minutely described dietary—e.g., in Mayence, biscuit, coffee, pea-sausages *(Erbswurst)*; in Munster, rye bread, brandy, and *Erbswurst*; the Munich *menu* has so far remained a secret. The men are constantly and closely watched, so that it is impossible for them to obtain any other food or drink than that laid down. The object of these experiments is to determine how long men will remain fit for work on such diet, and also to institute a comparison between the different diets tested.

## ANTISEPTICS AND ERYSIPELAS.

FROM a statistical study of the surgical cases which have been under his care during the past five years, M. Polaillon has come to the conclusion that Listerism and carbolic dressings generally do not diminish the liability to the occurrence of erysipelas, though they lessen the virulence of the disease. In his experience women are more frequently affected than men, but the latter occupy the more salubrious ward. Sometimes the erysipelas occurred in isolated cases. Erysipelas was more frequent during the cold and wet months. Carbolised dressings, he avers, certainly attenuate the virulence of erysipelas. He has seen epidemics spread from patient to patient rapidly, yet making but few victims, and those only whose constitutions were enfeebled by long-lasting disease.

## BALNEOLOGICAL CONGRESS.

THE seventh annual Congress of the Balneological Section of the German Therapeutical Society was held on March 14th and 15th at Berlin, under the Presidency of Professor Liebreich. Dr. Schott of Nauheim spoke regarding the importance of cutaneous resorption in connexion with the effects of baths. Dr. Grödel raised the question whether special balneo-therapeutical methods could be defined for various forms of spinal affections, but the discussion which ensued bore unfavourably on the possibility of such a treatment being perfected. Professor Eulenberg of Berlin spoke on the subject of electric baths, and the mode of their application to therapeutical purposes.

## THE LONDON UNIVERSITY AND MEDICAL DEGREES.

WE understand that the Senate of the University of London have consented to receive, on the 29th inst., at 4.45 P.M., a deputation from the Metropolitan Counties Branch of the British Medical Association in reference to the question of granting medical degrees to London medical students.

## THE GENERAL MEDICAL COUNCIL.

THE General Medical Council is summoned to meet on Tuesday, May 12th. The Executive Committee will meet on the preceding day, to arrange the order of business, &c.

## THE DEATH OF LORD CAIRNS.

WE have authority for saying, contrary to the statement of some newspapers, that Sir William Gull never saw Lord Cairns medically, and was never requested to see him.

## THE BICHLORIDE DOUCHE IN OBSTETRICS.

THE *New York Medical Record* reports that Dr. Hulbert, of St. Louis, stated, at a meeting of the St. Louis Medical Society, that he had salivated five patients with a bichloride solution (1 in 3000) given as a vaginal douche twice a day. No particulars are given, but it is evident that this agent, though a very effective antiseptic, will have to be used very carefully.

DR. J. F. STEVENSON, J.P., has just resigned the post of physician to the Birkenhead Borough Hospital. He was appointed as honorary surgeon to the institution in 1848, and having filled that office for a period of fifteen years, was appointed to the office which he has just resigned. Dr. Stevenson will continue his connexion with the charity as consulting physician. The committee have formally recorded their high sense of the valuable and efficient services rendered by Dr. Stevenson for this period of upwards of thirty-six years. Dr. Stevenson is to be congratulated, as it is not given to many members of even the medical profession to complete so long a term of gratuitous daily work.

SOME very exaggerated reports having been circulated concerning the prevalence of small-pox at Southend, it is well to mention that the case which is supposed to have been the first was not small-pox at all, but pleurisy; also that the sexton who was employed at the funeral, and who really died of small-pox shortly afterwards, caught the disease from his son, who was found to be suffering from it on his arrival from near London, and who has now recovered. We believe that, owing to the isolated position of the house and the care exercised by the medical officer of health, no other cases have occurred.

A CONTROVERSY on the subject of undue pressure in the public schools of America has been proceeding for some time, and from the *New York Daily Tribune* of the 24th ult. it now appears that the advocates of reform are steadily gaining ground, it being expected that the much-needed revision of the course of study and method of examinations in American schools will be substantially accomplished before the beginning of a new school year.

AN outbreak of English cholera, causing considerable alarm, is reported from Mountain Ash, where many people are affected in one part of the district called Caegarw, and one man has succumbed to the malady.

AT the Teachers' Conference at Norwich on the 8th inst., Mrs. Burgwin (Southwark) read a paper on over-pressure in schools, which she described as work against time to secure payment by results—a system injurious to teachers and torture to children, who were made disgusted with learning. She advocated the abolition of all grants under certain conditions, considering that education should not be hurried. A resolution was adopted to petition Parliament to appoint a Royal Commission to inquire into the existence, causes, and extent of over-pressure, it being felt that a departmental inquiry would not be satisfactory.

AT Jativa, in the province of Valencia, seventy persons have been attacked during the past fortnight by a disease resembling cholera. About half the cases ended fatally, and although several physicians have hesitated to pronounce the epidemic to be cholera, others who were sent to inquire into the outbreak affirm that it is that disease, and precautions have been taken to prevent its spread. The patients and their families have been put under canvas, and the houses where deaths have occurred have been disinfected.

MR. M. A. ADAMS, F.R.C.S., has devised a card containing the leading facts of importance in the record and investigation of contagious diseases. It embodies a neatly drawn-up chart to indicate the presumed normal periods of latency, premonitory fever, duration of pyrexia, and of the infectiveness of such diseases; and, being of convenient size, it should prove of some service. It is issued by Messrs. Churchill.

THE Paris correspondent of the *Record* says:—"A remarkable instance of confraternity has just occurred at Carcassone at the funeral of an eminent doctor, a Roman Catholic, who behaved most nobly during the last cholera epidemic. Three discourses were pronounced at the cemetery, one by the prefect of the Department, one by the president of the Doctors' Association, and one by the [Protestant] pasteur of the place, the Rev. Ad. Monod."

MR. ARNOLD TAYLOR, of the Local Government Board, has been holding an inquiry in the Ramsgate Town Hall concerning the loan of £20,000 required for the completion of the drainage and for the construction of new outfall works. Various difficulties and objections having been overcome, the opposition to the proposed scheme was nominal, and Mr. Taylor signified his intention of reporting favourably on the plan.

THE fourteenth Congress of the German Surgical Society met at Berlin on the 8th inst., under the presidency of Professor Langenbeck, who announced, to the manifest approval of the members, that the Committee had been pleased to nominate as honorary members Sir James Paget and Sir Joseph Lister.

WE are asked to state that applications for the appointment of Assistant Physician at Guy's Hospital, rendered vacant by the promotion of Dr. Frederick Taylor to the Physicianship, should be sent in on or before Thursday, the 30th inst.

WE learn that, at the unanimous request of the medical staff of the Paddington-green Children's Hospital, the post of senior physician will be filled by the appointment of Dr. Lauder Brunton.

THE eighth edition of Erichsen's Surgery is being translated into Spanish, and is appearing in monthly parts.

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THE Tottenham Sanitary Association, which for many years past has done good work in stimulating sanitary work in its district, now publishes its eleventh report—namely, that for 1884. In a population of some 70,000, the death-rate was 16·45 per 1000. Typhoid fever and diphtheria were both excessive in their fatality, the last disease being three times more fatal than it was during the same period in London. As a result of this occurrence, special efforts are being made by the sanitary inspector to elicit information as to the state of the drains, their disconnexion and ventilation, whenever fatal zymotic disease occurs. This is good in its way; but it would be far better if, in addition to such action after the occurrence of the very result which should be avoided, the authority were to organise such a system of house-to-house inspection as would lead to the adoption of measures which would prevent the occurrence of diseases due to faulty drain connexions.

## PERFORATING ULCER OF THE HAND.

THOUGH perforating ulcers occurring in the course of tabes dorsalis have their usual seat in the foot, there seems no reason why the hand should not be similarly affected. M. Terrillon showed a case of perforating ulcer of the palm of the hand at a recent meeting of the Société de Chirurgie. The ulcer was situate at the junction of the ring finger with the palm. The patient was a porter, and the subject of tabes dorsalis. M. Charcot did not hesitate to regard the ulcer as of dystrophic origin; pains and tinglings were experienced by the patient along the course of the ulnar nerve. A zone of anæsthesia was detected all round the ulcer. M. Nicaise inclined to the opinion that the ulcer was merely a corn which had become fissured, for the epidermis and cutis were thickened, whereas in perforating ulcers the cutis is thinned and even perforated.

## ANTHRAX IN BERMONDSEY.

FROM time to time during the past few years cases of fatal anthrax have been reported at Guy's Hospital, arising in connexion with the Bermondsey tanneries. The most recent case occurred last week. The subject was a labourer, aged thirty-eight, employed in handling hides at a wharfinger's. Less than four days before his death he complained of feeling sick, and noticed a small pimple on the side of the neck; and the next day he presented himself at the hospital with well-marked symptoms of malignant pustule. At the inquest Mr. Langham, the coroner, drew public attention to the great importance of persons infected with the poison making early application for hospital treatment. The verdict of the jury, "Natural death from blood-poisoning," seems to us to have been scarcely sufficient; for it cannot be too widely known that the disease contracted from these infected hides is a definite and specific affection, and that every precaution should be taken to protect workmen against contamination.

## EXPERIMENTS ON SOLDIERS' RATIONS.

EXPERIMENTS are being made in Munich, Mayence, Munster, and elsewhere, with companies specially formed of the strong men of different regiments. The men selected are obliged to submit for a fortnight to a strict campaigning diet, and during this period have to go through field exercises and route-marching for six hours daily in full marching order. Before and after every march out each man is carefully weighed. He receives daily a regulated quantity of a minutely described dietary—e.g., in Mayence, biscuit, coffee, pea-sausages *(Erbswurst)*; in Munster, rye bread, brandy, and *Erbswurst*; the Munich *menu* has so far remained a secret. The men are constantly and closely watched, so that it is impossible for them to obtain any other food or drink than that laid down. The object of these experiments is to determine how long men will remain fit for work on such diet, and also to institute a comparison between the different diets tested.

## ANTISEPTICS AND ERYSIPELAS.

FROM a statistical study of the surgical cases which have been under his care during the past five years, M. Polaillon has come to the conclusion that Listerism and carbolic dressings generally do not diminish the liability to the occurrence of erysipelas, though they lessen the virulence of the disease. In his experience women are more frequently affected than men, but the latter occupy the more salubrious ward. Sometimes the erysipelas occurred in isolated cases. Erysipelas was more frequent during the cold and wet months. Carbolised dressings, he avers, certainly attenuate the virulence of erysipelas. He has seen epidemics spread from patient to patient rapidly, yet making but few victims, and those only whose constitutions were enfeebled by long-lasting disease.

## BALNEOLOGICAL CONGRESS.

THE seventh annual Congress of the Balneological Section of the German Therapeutical Society was held on March 14th and 15th at Berlin, under the Presidency of Professor Liebreich. Dr. Schott of Nauheim spoke regarding the importance of cutaneous resorption in connexion with the effects of baths. Dr. Grödel raised the question whether special balneo-therapeutical methods could be defined for various forms of spinal affections, but the discussion which ensued bore unfavourably on the possibility of such a treatment being perfected. Professor Eulenberg of Berlin spoke on the subject of electric baths, and the mode of their application to therapeutical purposes.

## THE LONDON UNIVERSITY AND MEDICAL DEGREES.

WE understand that the Senate of the University of London have consented to receive, on the 29th inst., at 4.45 P.M., a deputation from the Metropolitan Counties Branch of the British Medical Association in reference to the question of granting medical degrees to London medical students.

## THE GENERAL MEDICAL COUNCIL.

THE General Medical Council is summoned to meet on Tuesday, May 12th. The Executive Committee will meet on the preceding day, to arrange the order of business, &c.

## THE DEATH OF LORD CAIRNS.

WE have authority for saying, contrary to the statement of some newspapers, that Sir William Gull never saw Lord Cairns medically, and was never requested to see him.

## THE BICHLORIDE DOUCHE IN OBSTETRICS.

THE *New York Medical Record* reports that Dr. Hulbert, of St. Louis, stated, at a meeting of the St. Louis Medical Society, that he had salivated five patients with a bichloride solution (1 in 3000) given as a vaginal douche twice a day. No particulars are given, but it is evident that this agent, though a very effective antiseptic, will have to be used very carefully.

DR. J. F. STEVENSON, J.P., has just resigned the post of physician to the Birkenhead Borough Hospital. He was appointed as honorary surgeon to the institution in 1848, and having filled that office for a period of fifteen years, was appointed to the office which he has just resigned. Dr. Stevenson will continue his connexion with the charity as consulting physician. The committee have formally recorded their high sense of the valuable and efficient services rendered by Dr. Stevenson for this period of upwards of thirty-six years. Dr. Stevenson is to be congratulated, as it is not given to many members of even the medical profession to complete so long a term of gratuitous daily work.

SOME very exaggerated reports having been circulated concerning the prevalence of small-pox at Southend, it is well to mention that the case which is supposed to have been the first was not small-pox at all, but pleurisy; also that the sexton who was employed at the funeral, and who really died of small-pox shortly afterwards, caught the disease from his son, who was found to be suffering from it on his arrival from near London, and who has now recovered. We believe that, owing to the isolated position of the house and the care exercised by the medical officer of health, no other cases have occurred.

A CONTROVERSY on the subject of undue pressure in the public schools of America has been proceeding for some time, and from the *New York Daily Tribune* of the 24th ult. it now appears that the advocates of reform are steadily gaining ground, it being expected that the much-needed revision of the course of study and method of examinations in American schools will be substantially accomplished before the beginning of a new school year.

AN outbreak of English cholera, causing considerable alarm, is reported from Mountain Ash, where many people are affected in one part of the district called Caegarw, and one man has succumbed to the malady.

AT the Teachers' Conference at Norwich on the 8th inst., Mrs. Burgwin (Southwark) read a paper on over-pressure in schools, which she described as work against time to secure payment by results—a system injurious to teachers and torture to children, who were made disgusted with learning. She advocated the abolition of all grants under certain conditions, considering that education should not be hurried. A resolution was adopted to petition Parliament to appoint a Royal Commission to inquire into the existence, causes, and extent of over-pressure, it being felt that a departmental inquiry would not be satisfactory.

AT Jativa, in the province of Valencia, seventy persons have been attacked during the past fortnight by a disease resembling cholera. About half the cases ended fatally, and although several physicians have hesitated to pronounce the epidemic to be cholera, others who were sent to inquire into the outbreak affirm that it is that disease, and precautions have been taken to prevent its spread. The patients and their families have been put under canvas, and the houses where deaths have occurred have been disinfected.

MR. M. A. ADAMS, F.R.C.S., has devised a card containing the leading facts of importance in the record and investigation of contagious diseases. It embodies a neatly drawn-up chart to indicate the presumed normal periods of latency, premonitory fever, duration of pyrexia, and of the infectiveness of such diseases; and, being of convenient size, it should prove of some service. It is issued by Messrs. Churchill.

THE Paris correspondent of the *Record* says:—"A remarkable instance of confraternity has just occurred at Carcassone at the funeral of an eminent doctor, a Roman Catholic, who behaved most nobly during the last cholera epidemic. Three discourses were pronounced at the cemetery, one by the prefect of the Department, one by the president of the Doctors' Association, and one by the [Protestant] pasteur of the place, the Rev. Ad. Monod."

MR. ARNOLD TAYLOR, of the Local Government Board, has been holding an inquiry in the Ramsgate Town Hall concerning the loan of £20,000 required for the completion of the drainage and for the construction of new outfall works. Various difficulties and objections having been overcome, the opposition to the proposed scheme was nominal, and Mr. Taylor signified his intention of reporting favourably on the plan.

THE fourteenth Congress of the German Surgical Society met at Berlin on the 8th inst., under the presidency of Professor Langenbeck, who announced, to the manifest approval of the members, that the Committee had been pleased to nominate as honorary members Sir James Paget and Sir Joseph Lister.

WE are asked to state that applications for the appointment of Assistant Physician at Guy's Hospital, rendered vacant by the promotion of Dr. Frederick Taylor to the Physicianship, should be sent in on or before Thursday, the 30th inst.

WE learn that, at the unanimous request of the medical staff of the Paddington-green Children's Hospital, the post of senior physician will be filled by the appointment of Dr. Lauder Brunton.

THE eighth edition of Erichsen's Surgery is being translated into Spanish, and is appearing in monthly parts.

DR. ANGEL MONEY has been appointed Assistant Physician to the Hospital for Sick Children, Great Ormond-street, in the place of Dr. Barlow, promoted to the post of Physician to the institution.

IN a letter to the Lord Chancellor, dated April 6th, the Earl of Shaftesbury has expressed his decision to resign his seat on the Board of Commissioners in Lunacy.

## THE DRAMATIS PERSONÆ OF THE TERCENTENARY FESTIVAL OF THE UNIVERSITY OF EDINBURGH.

WE have good news for the alumni and graduates of the Edinburgh University. The event of the Tercentenary was one not likely to be forgotten. In itself it was one of the most remarkable gatherings of the men of light and leading in history. It produced, too, the "Story of the University," by the lamented and accomplished principal, Sir Alexander Grant, which is in itself guarantee that it will not be allowed to be forgotten. But as if this were not enough, a most exquisite volume of "Portraits of the High Officers and Professors of the University of Edinburgh at its Tercentenary Festival" has been published at the University Press by Messrs. T. and A. Constable. The volume before us, which is so charming as to disarm all criticism, is in a quarto form; but we gather that there are a certain number of folio copies to be had by those still more luxurious in their literary tastes. For ourselves, we are well content with and very grateful for the quarto form, which makes one of the pleasantest and most valuable additions to a library which we have seen for many days, and which cannot be too much praised either as regards the work of the printer, the compiler, or the artist. The artist is Mr. William Hole, A.R.S.A., who had already given some artistic intimations of the vivid impression made on his mind by the chief actors of the Tercentenary. In the forty or fifty portraits now presented to the public, the art of etching appears to the greatest advantage, and will hand down to a remote time a representation of the present professors. Even those learned professors whose physical qualities do not facilitate the etcher's art come out in style so natural and life-like as to be most interesting. And in the case of a few of the portraits, the result is most effective, as in that of Sir Stafford Northcote, of the lamented Principal, of Professor Blackie and his successor, of Professor Masson (in his slippers, sitting cosily by his fireside, and, low be it spoken, in the obvious enjoyment of his meerschaum), of Professor Turner, of Professor Fraser, of Professor Douglas Maclagan, of "John Chiene," of Professor Grainger Stewart, of Professor Rutherford, and of Professor Greenfield. Perhaps the most striking piece of art in the book is the portait of Professor Geikie, sitting on a boulder, a hammer in one hand and a geological specimen in the other style. The interest of the volume is greatly, if pathetically, enhanced by a frontispiece entitled "*Umbræ Quædam*," and giving the heads of professors and others recently dead who have shed lustre on the university, and whose fame still gives a strange fascination to the school—notably Sir William Hamilton, John Goodsir, David Brewster, James Syme, J. Y. Simpson, J. Hughes Bennett, R. Christison, J. H. Balfour, T. Carlyle, and others. Though the etchings and the general style of the book are the chief attractions of this happily conceived work, we should do great injustice to its promoters if we did not say a word in praise of the biographical sketches which are attached to each portrait. They are remarkably well done, occasionally perhaps betraying a little too much local complacency, but generally most readable and instructive. We cannot too strongly express our pleasure in possessing such a memento of so eventful an occasion. The only qualification of our satisfaction we have to make in our announcement of the book is that the number of copies is, we presume necessarily, limited. The impression for sale of the folio copies is 100, that of the quarto 750. *Beati possidentes!*

## INTERNATIONAL CONGRESS OF HYDROLOGY AND CLIMATOLOGY.

THE first International Congress of Hydrology and Climatology will be held at Biarritz in October, 1886. Amongst the principal questions which will be brought before the members of the Congress are the following:—The Influence of the Phenomena of the Air on Mineral Waters, the Electrical Phenomena which manifest themselves in the presence of Mineral Waters, the Combinations which form Sulphur in the Waters termed Sulphur Waters, the Differences of Action between Fresh and Salt Water in Hydrotherapy, the Hygienic and Dietetic Rules to be observed whilst undergoing a course of Thermal Treatment, the daily Variations of Temperature in Sanitary Stations, General Characters of the Geological Constitution of the Pyrenees, the Hygienic Conditions which ought to prevail at Summer and Winter Health Resorts, the Influence of Sea Air upon Scrofulous Affections, the Influence of Winds, Quarantine by Land and Sea, &c. The Congress will last for eight days, and excursions to various places of interest in the neighbourhood will take place. The honorary president is the Minister of Commerce, and the acting president will be Dr. Durand-Fardel, the post of general secretary being filled by Dr. F. Garrigon.

# Public Health and Poor Law.

## LOCAL GOVERNMENT DEPARTMENT.

### REPORTS OF MEDICAL OFFICERS OF HEALTH.

*Worcester Urban District.*—In submitting his eleventh annual report to the Town Council of Worcester, Dr. Strange gives marked attention to cleansing of ashpits and cesspits, to the care of sewers and house-drains, and to the supply of drinking water to the inhabitants; and he does so with special reference to a somewhat heavy visitation of enteric fever from which the city has suffered. In the first place, Worcester still exhibits some of the old huge ashpits and cesspits, receptacles which were contrived in days when sanitary authorities were all but unknown, and when scavenging was a thing to be carried out as seldom as possible. Now, however, we know that these accumulations are hurtful in the extreme, and it should be a first object of the authority to get rid of such nuisances, especially in view of the risk they are to health. Much is, fortunately, being done in this direction, and it is to be hoped that there will be no need to recur to them in future reports, except as barbarisms of the past. As to the sewers, it is stated that complaints are made with respect to the emanations from the ventilators; but we can hardly agree with Dr. Strange that, inasmuch as these ventilators are only discharging their proper function, it is unwise to complain of them. Sewer ventilators should not stink. If they do, they are either not sufficiently numerous, or the sewers do not properly cleanse themselves, or else offensive house-drains are connected with them and foul them. If the sewers and house-drains are properly constructed so as to contain no stagnant contents, and if the ventilators are so numerous that a large number of them act as fresh-air inlets to dilute the sewer air before it escapes, then nuisance should not arise. But we fear that faulty conditions as to this exist in Worcester; for Dr. Strange talks of sewer air being forced back into dwellings unless it can escape into the streets. Such a forcing back should be impossible if there were an absolute break between the interior of the houses and the interior of the drains. In many hundred cases this break has now

been effected in Worcester, and it is to be hoped that it will soon be universal. The detailed account given as to the water-supply to the city, now derived from the Severn, raises some very important considerations. As matters now stand, the Severn is liable to pollution by sewage and other organic matter after a heavy rainfall. Thus, the sewage of Kidderminster, during the great enteric fever epidemic there, got into the Severn fourteen miles above the Worcester intake, and the question now being dealt with is whether Worcester is to endeavour to remedy its river supply and improve its method of filtration, or to resort to an artesian well. In seeking advice, the opinion of the borough analyst has been sought, especially as to whether filtration would secure the inhabitants against "this great source of danger" (i.e., "pollution by the germs of disease"), and he has answered, "If efficiently carried out, I believe it does." What this belief is based on we do not know, but we are quite certain that this view should not be acted on as regards a town water-supply. No such filtration as can be carried out by Worcester is likely to have the effect they wish to attain; and if the river is to remain subject to any such risks as hitherto, we should counsel its abandonment as a source of water-supply. The annual death-rate in Worcester for 1884 was 20·9 per 1000. Thirty-two cases, chiefly of enteric fever, were admitted into the Brabourne Hospital.

*Lewes Urban District.*—Lewes has for some years past had a satisfactory death-rate. Last year it reached 15·9 per 1000, somewhat in excess of the two previous years. Consumption is a somewhat fertile source of death, and we fear that the situation of the town at the foot of a chalk range in a river valley is a main cause in producing this result. The isolation hospital continues usefully to fulfil its purpose. The numbers admitted are not large, but the admissions prevent the extension of infectious disease, and, as Mr. Braden says, it would be impossible to say what mischief the thirty cases admitted since its construction would have brought about had they not been isolated.

*Surbiton Urban District.*—This suburban district enjoys a small death-rate. It was 10·8 per 1000 in 1883 and 11·9 in 1884, the rate for England and Wales during the latter year being 19·6. The zymotic rate is also low—namely, 1·4 per 1000. Infantile diarrhœa, too, which may be regarded as affording a valuable criterion of the healthiness of a place, only causes about 2 or 3 deaths per annum; in short, as a zymotic affection it is practically absent. Well water is, however, still resorted to, analysis almost invariably being such as to call for its abandonment. The ventilation of the sewers is engaging the attention of the authority, and a number of high shafts are being erected. There is as yet no hospital for infectious diseases. The neighbouring authority of the Kingston rural district have set an example as to this, and Dr. Coleman suggests inquiry as to whether Surbiton may share in its advantages.

*Torquay Urban District.*—The sanitary inspector for this district has issued a report showing the progress which has been made during the past year in the various matters coming within his cognisance, and it is certainly a record of very substantial advance. The detailed account of current work relating to such matters as the ventilation of drains and soil-pipes, drain disconnexions, closure of wells, disinfection of rooms, &c., relates to 4639 improvements. In addition to this as many as 545 new houses have been overlooked during the course of their erection. The change throughout the town from old, unventilated, choked, clay-jointed, untrapped drains to efficient, self-cleansing, and well ventilated conduits is in itself immense, and added to this work a large amount of incidental improvement has been effected in allied matters. Torquay aims at securing the reputation of being a real health resort, and such work as Mr. MacMahon gives an account of is eminently calculated to attain that end.

*Belfast.*—During the four weeks ending Feb. 21st the total births registered were 493, and the deaths 472, which latter included 216 deaths from lung affections. The average death-rate was, from all causes, 28 per 1000, from zymotic diseases 2·6, and from lung diseases 12·6. The general death-rate was a little higher than in January, though the rate from lung affections was 2 per 1000 less. Scarlatina still lingers amongst the population, but it is gratifying to learn that both typhus and enteric fevers have almost disappeared.

*Cork.*—During the four weeks ending the 21st ult. the births numbered 152, or a rate of 24·66; and the deaths 204, including 41 which took place in the workhouse. Excluding the latter, the mortality was equal to 33·09 per 1000. Compared with the corresponding return of last year, the death-rate has increased, and the birth-rate decreased.

## VITAL STATISTICS.

### HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5450 births and 3937 deaths were registered during the week ending the 4th inst. The births were 362 below, while the deaths exceeded by 310 the average weekly numbers during 1884. The annual death-rate in these towns, which had been equal to 23·5 and 23·2 per 1000 in the preceding two weeks, further declined last week to 23·1. During the thirteen weeks ending last Saturday the death-rate in these towns averaged 21·9 per 1000, against 24·7, the mean rate in the corresponding periods of the nine years 1876-84. The lowest death-rates in these towns last week were 15·7 in Leicester, 17·8 in Bradford, 19·1 in Brighton, and 19·8 in Wolverhampton. The rates in the other towns ranged upwards to 32·6 in Norwich, 33·7 in Newcastle-upon-Tyne, 34·3 in Preston, 34·7 in Oldham, and 40·4 in Sunderland. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 466, against numbers steadily increasing from 377 to 451 in the preceding five weeks; they included 173 from measles, 130 from whooping-cough, 45 from "fever" (principally enteric), 33 from scarlet fever, 32 from small-pox, 27 from diphtheria, and 26 from diarrhœa. No death was referred to any of these diseases in Derby last week, whereas they caused the highest death-rates in Norwich, Newcastle-upon-Tyne, Cardiff, and Sunderland. The highest death-rates from measles occurred in Bristol, Newcastle-upon-Tyne, Cardiff, and Sunderland; from whooping-cough in Oldham, Bristol, and Preston; from scarlet fever in Preston and Newcastle-upon-Tyne; and "fever" in Plymouth and Norwich. Of the 27 deaths from diphtheria in the twenty-eight towns 16 occurred in London and 2 in Norwich. Small-pox caused 54 deaths in London and its outer ring of suburban districts, 2 in Manchester, 1 in Birmingham, and 1 in Leeds. The number of small-pox patients in the metropolitan asylum hospitals, which had been 830 and 865 on the preceding two Saturdays, further rose to 879 at the end of last week; 141 cases were admitted during the week, against numbers increasing from 94 to 179 in the previous four weeks. The Highgate Small-pox Hospital contained 90 patients on Saturday last, 25 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 487 and 448 in the preceding two weeks, rose again to 478 last week, but were 65 below the corrected weekly average. The causes of 100, or 2·5 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bradford, Bolton, Wolverhampton, and Plymouth. The largest proportions of uncertified deaths were registered in Oldham, Preston, Sheffield, Halifax, and Hull.

### HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 24·2 and 23·3 per 1000 in the preceding two weeks, rose last week to 25·0, and exceeded the rate last week in the twenty-eight large English towns by 1·9. The rates in the Scotch towns ranged from 15·2 in Leith and 17·0 in Edinburgh and Aberdeen, to 30·8 in Paisley and 31·5 in Glasgow. The 600 deaths in the eight towns included 34 from whooping-cough, 23 from measles, 11 from scarlet fever, 6 from "fever" (typhus, enteric, or simple), 5 from diarrhœa, and not one from small-pox; in all, 84 deaths resulted from these principal zymotic diseases, against 85 and 73 in the preceding two weeks. These 84 deaths were equal to an annual rate of 3·4 per 1000, which was 0·7 above the mean rate from the same diseases in the twenty-eight English towns. The deaths from whooping-cough, which had been 35 and 32 in the previous two weeks, were 34 last week, of which 22 occurred in Glasgow, 4 in Edinburgh, and 4 in Dundee. The 23 fatal cases of measles showed an increase of 8 upon the number in the

previous week, and were all returned in Glasgow. The 11 deaths from scarlet fever also showed an increase upon the number in the previous week, and included 5 in Paisley, 3 in Glasgow, and 2 in Edinburgh. The 6 deaths referred to "fever" corresponded with the number in the previous week, and included 3 in Edinburgh and 2 in Greenock. The deaths from acute diseases of the respiratory organs in the eight towns, which had been 124 and 122 in the previous two weeks, rose to 130 last week, and exceeded the number in the corresponding week of last year by 22. The causes of 103, or 17 per cent., of the deaths in the eight Scotch towns last week were not certified.

### HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 39·5, 34·6, and 40·4 per 1000 in the preceding three weeks, declined again to 33·6 in the week ending the 4th inst. During the thirteen weeks ending last Saturday the death-rate in the city averaged no less than 34·0 per 1000; whereas in the same period the rate did not exceed 21·6 in London and 20·0 in Edinburgh. The 227 deaths in Dublin last week showed a decline of 46 from the exceptionally high number in the previous week, and included 24 which were referred to the principal zymotic diseases, against 30 and 32 in the preceding two weeks. Of these 24 deaths, 13 resulted from measles, 5 from "fever," (typhus, enteric, or simple), 4 from diarrhœa, 2 from scarlet fever, and not one either from small-pox, diphtheria, or whooping-cough. The annual death-rate from these principal zymotic diseases was equal to 3·5 per 1000; in London and Edinburgh the rates from these diseases last week were equal to 2·6 and 2·1 respectively. The fatal cases of measles in Dublin, which had been 16 and 12 in the previous two weeks, were 13 last week. The deaths referred to scarlet fever and "fever" were respectively 5 and 1 below the numbers in the preceding week. Three inquest cases and 3 deaths from violence were registered within the city; and 86, or 38 per cent., of the deaths were recorded in public institutions. The deaths both of infants and of elderly persons showed a considerable decline from the high numbers in the previous week. The causes of 26, or 11 per cent., of the deaths in the city last week were not certified.

## THE SERVICES.

### ARMY MEDICAL SCHOOL.

THE fiftieth session of the Army Medical School was opened at Netley on the 2nd inst. Forty-five surgeons on probation for the British army and five for the Indian army have joined. In consequence of the urgent need for medical officers, these gentlemen will only remain for two months instead of four, their places being taken by a second batch, who will join early in June and be dismissed in the beginning of August. The introductory address was delivered by Professor Aitken, F.R.S., who gave a philosophical lecture dealing with the application of the Darwinian hypothesis and the evolution of disease. The Director-General, Dr. Crawford, was present, and addressed some words of counsel to the surgeons on probation. Sir Joseph Fayrer, K.C.S.I., Surgeon-General Murray, Colonel Bell, and the officers of the school and hospital staffs were also present.

Several lady nurses from the Guards Hospital in London have left for Suez for duty with the Guards' field hospital at that place.

It having been decided to separate the duties of the medical administration of the troops stationed in the Home and Woolwich districts, which have hitherto been vested in one officer, Surgeon-General Sir James Hanbury, who was principal medical officer in Egypt during the campaign of 1882, takes over the medical charge of the Home district, and Brigade Surgeon T. Rudd that of the Woolwich district.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of April 1st, 1881, Staff Surgeon Alfred Hubert Kelly, B.A., M.D., has been allowed to withdraw from Her Majesty's Naval Service, with a gratuity.

The following appointments have been made:—Staff Surgeon Edward E. Mahon, to the *Bacchante;* Staff Surgeon Herbert M. Ellis, to the *Sapphire;* Staff Surgeon Robert W. Williams, to the *Pegasus;* Surgeon H. G. Jacob, to the *Racer;* Surgeon J. M. Rogers, to the *Agincourt;* J. W. Grene, to be Surgeon and Agent at Crookhaven; Fleet Surgeon James Flanagan, to the *Cambridge;* Fleet Surgeon Garland W. L. Harrison, to the *Northumberland;* Surgeon Herbert W. G. Doyne, to the *Bacchante;* Surgeon James C. F. Whicher, to the *Agincourt;* Surgeon Henry G. T. Strickland, to the *Victor Emanuel;* and Surgeon J. D. Henwood, to Plymouth Hospital.

A trained naval sick-berth staff is being established, and boys, who will be medically examined as to fitness for the service, will be selected from Greenwich Hospital School, the mercantile marine, and other sources. After completing a year's service in a training ship they will be sent to Haslar Hospital, where they will receive instruction in elementary anatomy, bandaging, in dressing wounds, and such other exercises as will enable them to render first aid to the wounded afloat and ashore. After performing these preliminaries the candidates will undergo an examination, and if found qualified they will be rated as sick-berth attendants with Admiralty approval. A notice has also been published that, pending the introduction of the new scheme, a few young men, whose age is between eighteen and twenty years, will be trained as nurses. They will have, if fit for the duties, all the advantages of the new system.

## Correspondence.

"Audi alteram partem."

### "STRANGULATED OMENTAL HERNIA."

*To the Editor of* THE LANCET.

SIR,—Some time ago Mr. Rushton Parker published a short work on "Abdominal Hernia," in which he questioned the usual doctrine that the strangulation of omentum only in a hernia will produce the same symptoms (though possibly less severe) as are produced by strangulation of the intestine, and he repeated his views in your columns on May 17th, 1884. He called attention to the fact that in my work on the "Principles and Practice of Surgery" I had supported the usual teaching, although I thought it right to call attention to the circumstance that the ligature of the omentum produces no such symptoms. Mr. Parker believes that the old doctrine is erroneous, and that the symptoms, in cases where strangulation is believed to have occurred in herniæ, which are really epiploceles—i.e., purely omentum—are due either to obstruction resulting from the dragging of the omentum on the colon, or to peritonitis, or to purely functional obstruction of intestine due to some other cause, and unconnected with the epiplocele except by simultaniety of occurrence;[1] whilst he believes that there is another class of cases in which the hernia is not really omental only; but that a piece of bowel has been in the sac, but has somehow got reduced either during the operation, or by the taxis just before the operation. I replied to Mr. Parker's criticisms in a letter which you published on August 4th, 1883, in which I hesitated to accept the second hypothesis (that of the reduction of previously strangulated bowel). As, however, a case has lately occurred in my own practice showing the reality of the fact, I hasten to put it on record in justice to Mr. Parker, as well as in consideration of the interest of the surgical question itself.

The heads of my case are briefly these:—An old man (aged seventy-three) was admitted into St. George's Hospital during the night of March 19th for umbilical hernia, with constipation and vomiting. I was accidentally absent, and a colleague was called in, who saw no reason to interfere by operation. Nor did I when I saw the man next day. He had had the rupture for two years. Latterly he had had a bad cough, and the tumour had become larger. On the previous day, after a severe fit of coughing, he suddenly experienced great pain at the umbilicus, and increased swelling. He began to vomit soon afterwards. The vomiting, however, at first was almost entirely of the contents of the

[1] Of this last view Mr. Parker gives an example in the accompanying letter.

stomach, and seemed to be excited by his cough. I must not burden your space with all the particulars of the case. Gentle attempts were made to reduce the hernia, but with no effect, on March 20th, and I believe no serious effort at taxis was made on any subsequent occasion. The man went on in much the same way for three days; but then the vomit became obviously more "fæcal"—i.e., it was no longer from the stomach only but from the small intestines, and his strength began also to fail, so that it was clear that if not relieved he would die. At the same time, his chest was so full of rhonchi, and his heart's action so feeble, that I was unwilling to give an anæsthetic. On March 23rd the parts over the sac were frozen and divided, and the sac found tightly constricted. The stricture being freely divided, attempts were made to reduce the hernia; and these not succeeding, the sac was opened, and nothing found in it but congested omentum, which was removed after tying its stalk with a double catgut ligature. The vomiting continued, and the patient died eighteen hours afterwards. On post-mortem examination the omentum was found adherent, not to the neck of the sac, which was quite free, but to the parietal peritoneum inside the belly. The portion in the sac could not, therefore, have exerted any traction on the colon, nor was there any serious displacement or any loading of that portion of the bowel. But about four inches from the ring was found a knuckle of small intestine, which had obviously been recently strangulated, and is thus described by our curator, Mr. Shield:—"It was about two inches in length, congested, and claret coloured, and was terminated above and below by the dark narrow furrow, both discoloured and contracting the bowel, which is commonly seen in intestine reduced in hernia, and is unmistakable in appearance." The fresh appearance of the constrictions and the still congested condition of the bowel appear to me conclusive proof that the reduction of the constricted intestine must have taken place during the operation, eighteen hours before death, and not in the attempts at taxis three days before.

The case proves beyond reasonable doubt that Mr. Parker is right in believing that some of these cases are not cases of pure epiplocele at all, and that I was wrong in thinking that an experienced surgeon could not have reduced a small knuckle of bowel without being aware of the fact, or noticing an unoccupied portion of the sac from which the bowel had been reduced. It does not, however, convince me of the truth of Mr. Parker's opinion, that strangulation of omentum only cannot produce the symptoms which I have indicated, and I confess that I still hold the opinion stated in my book, in connexion with many other surgeons, who also have met with cases inexplicable to their minds in any other way, difficult, as it may be, to form a satisfactory theory of the occurrence. At any rate, I thought it my duty to ask you for space to record this case.

I am, Sir, yours truly,

Great Cumberland-street, April 6th, 1885. T. HOLMES.

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*To the Editor of* THE LANCET.

SIR,—Mr. Timothy Holmes has had the great kindness to let me see the copy of his letter, in which he makes very handsome reference to me. Having myself found post-mortem evidence of previous intestinal replacement in fatal strangulated hernia that had been, or was capable of being, supposed to be mere epiplocele, I had the best grounds for believing that a similar condition of things could occur again. The combined circumstances that render this observation possible must be so rare that Mr. Holmes's independent confirmation lends to my contention a support without which many would fail to be impressed by it. After all, however, his case, like the one I referred to, merely shows how, in a certain rare, but always possible, class of cases, to avoid the fallacy of attributing to strangulated omentum symptoms really caused by strangulated intestine. I continue unshaken in the firm conviction that strangulation of omentum alone, *as* strangulation, can have no symptoms, seeing that the tightest ligature never produces them. Among the various explanations that can be given of the undoubted symptoms that are found in cases where omentum alone exists, and is supposed to be strangulated, I mentioned the occurrence of intestinal obstruction of the "functional" kind in persons who happen to also have an omental, though harmless, hernia. It is not a very uncommon thing to meet with patients who suffer from constipation, vomiting, griping, or vague abdominal distress. Such cases are remedied by fasting, by rest and warmth, and by the narcotic assistance of opium, alcohol, or both. In my pamphlet on "Abdominal Hernia" I asked, "Why such symptoms should not now and then occur to persons already possessed of a hernia?" They are, in fact, perfectly well known in old large hernia, especially umbilical; and although the hernia of intestine is often, if not generally, at fault, even if not strangulated, by being materially hampered through adhesions, &c., still such symptoms have often nothing whatever to do with the hernia. It must be so, for surely persons do not require a hernia in order to get "bowel complaint," whether it be diarrhœa, constipation, or mild obstruction. Such being the case, it is contrary to common sense and clinical experience to put down such symptoms at once, and in every case, to the supposed strangulation of a previously long harmless omental hernia. Such a case I, not long ago, witnessed. On Dec. 22nd, 1884, I saw, in consultation with Mr. H. O. Thomas, an old lady of nearly seventy who had long had an irreducible omental femoral hernia. For two or three days previously she had had constipation, vomiting, furred tongue, loss of appetite, griping, and general abdominal distress. The hernia, moreover, had increased in size, but whatever its contents, it was not resonant on percussion. Taxis was very gently attempted under an anæsthetic, as well as without, but the hernia could not be in the least altered in bulk or shape. The case we both admitted to be consistent with the existence of functional obstruction of intestine, independently of the hernia; yet, knowing how insidiously strangulation of intestine occurs, without much addition to the hernial bulk, I felt that operation would be the wiser course to make sure. But Mr. Thomas rather held to the view that the hernia was not in this case in fault. So after ample discussion I agreed to his proposal to trocar the centre of the hernia for exploratory purposes. The only issue was blood-stained serum, without odour at all, on which it was agreed that we had not reached intestine and that the patient could fairly be left to medical treatment. A little morphia was given under the skin and the mouth merely moistened with necessary liquid, the result being entire cessation of symptoms and speedy recovery. Cases like this shew that the whole casuistry of the subject is rather more intricate than is often imagined, and prove more and more how well founded is the very reasonable rejection of the doctrine assigning symptoms to mere strangulation of only omentum. It has occurred to me while writing that some might think that a portion of intestine was possibly here reduced in the manipulations. This is not possible; we were keenly on the look out for any such fact, which would have been welcomed, and could not under the circumstances have eluded observation. No change whatever in the bulk of the hernia resulted until it was tapped. A similar case is recorded by Mr. Thomas at the end of his work on intestinal obstruction, but the above is the first that I have myself recognised. Pray excuse the length to which I have gone.

I am, Sir, yours truly,

Rodney-street, Liverpool, April 6th, 1885. RUSHTON PARKER.

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## "SMALL-POX AND VACCINATION."

*To the Editor of* THE LANCET.

SIR,—In your last week's notes in Parliament, at p. 643, it is not made clear that the seventy-eight persons engaged at the London small-pox hospitals, about 7 per cent. of the whole number employed, who had had small-pox had it before they were engaged at those hospitals. When Mr. G. Russell from his official position had to state that his department had no reason to doubt that "none of the nurses at any of the London small-pox hospitals who had been *duly vaccinated before entering on their duties* have ever caught small-pox" is substantially accurate, he goes on to say that this might have been more guardedly expressed in "Facts concerning Vaccination." The words now put in italics show how sufficiently the expression is guarded, and most members of the Local Government Board would probably admit this.

Of late it has been common to report cases of small-pox after vaccination, not only when the vaccination was performed after the reception of small-pox infection, but also where there is no evidence of any effect of revaccination having been produced. In times of great pressure persons have been engaged for duty at small-pox hospitals before their revaccination was known to be effective. Even

a previous attack of small-pox is not a positive safeguard unless tested by a revaccination. All the evidence accumulated to the present time conclusively proves that vaccination has lost none of its protective power, and we are constantly reminded to our cost that small-pox has lost none of its virulence.

I am, Sir, your obedient servant,

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SIR,—The above case came on for trial before the judge of the county court, Croydon, on the 31st ult. After all the points on which we relied had been ably put forward I regret to state that the judge, without calling on the defendant's counsel for reply, gave judgment in his favour, giving costs also on the higher scale, alleging as the grounds for his decision that he held that a workhouse and workhouse infirmary were public institutions within the meaning of the 5th section of the Coroners' Witnesses Act, and that the officers of such institutions were not entitled to payment for making post-mortems and attending and giving evidence; thereupon our solicitor applied for leave to appeal, which the judge, after some hesitation, assented to.

This decision, if not upset on appeal, will seriously affect the interests of all workhouse medical officers, who in future will not be paid for such examinations and evidence, and it practically reverses the system that has been followed since the Act came into force, which has been to pay workhouse medical officers for such examinations and evidence.

The trial so far will cause a heavy drain on the very limited income of our Association, and without immediate pecuniary assistance it will be impossible for us to prosecute further proceedings. May I ask, therefore, my professional brethren who are able and willing to at once announce their intention of supporting us by forwarding subscriptions to me.

I am, Sir, yours obediently,

JOSEPH ROGERS,
Chairman of Council, Poor-law Medical Officers' Association.

31, Montague-place, W.C., April 1st, 1885.

## "ALLEGED DEATH FROM VACCINATION."

*To the Editor of* THE LANCET.

SIR,—After reading your article I feel it due to myself, being misunderstood, to say:—1. That I accept, and have for twenty years accepted, the proposition that vaccination modifies small-pox. 2. I do not consider "arm-to-arm vaccination an undesirable method of procedure," except in the case of tuberculous infants. 3. I was called urgently, for the first time, on the 14th ult., to the deceased infant, H. J. Downing Walker, because the child was "in a fit." The difficulty in breathing spoken of in Court by Mrs. Walker was on the 12th ult. Any observations made in Court as to the effect of point vaccination as compared with arm-to-arm vaccination were given only as the result of my own individual experience. Finally, in the certificate, which the superior wisdom of a coroner's jury was pleased to condemn, it was my intention to state, according to my light, the prominent medical facts preceding death, and that being so, the certificate, when written, was a "correct statement" of the opinion of

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SIR,—I wish to bring under your notice a new invention, which I presume will be of great advantage to surgeons in the treatment of fractures of the leg. It is an improved fracture box, suitable for any fracture of the leg, simple or compound, or disease of the ankle-joint requiring rest in position. It consists of three pieces: bottom and two sides. The bottom is pierced with drainage holes, and has a hinged foot-plate attached. This foot-plate is further connected to the foot end of the bottom splint by a regulating screw. This screw is a "fine thread" screwed socket rotating on a screwed pin. This screw regulates the angle at which the foot-plate is required to be kept. One of the side splints is plain; the other is in two parts, kept together by a brass slide having a longitudinal slot of the diameter of the thumb-screws, on which it runs, and which serve to retain it in position. This is the "interrupted" splint of the fracture box. It can be made a plain splint if required, or can be fixed at any divergence by the thumb-screws. One of these interrupted splints is only required, as both side splints are reversible, and will fit either side of the apparatus. The usual straps and buckles tie it together. The accompanying woodcut will assist in giving a clear idea of the nature and construction of the apparatus.

I remain, Sir, yours sincerely,

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Medical Officer, Midleton Hospital.

Riversdale, Midleton, co. Cork, April, 1885.

NEW WORKHOUSE INFIRMARY AT WEST BROMWICH.—The *Building News* gives a lithograph of the New Infirmary, West Bromwich. Accommodation is provided for 224 patients. The arrangement of the wards is on the pavilion system. The contagious and infectious wards are separated from the buildings, and so arranged that each ward may be isolated. None of the buildings exceed two storeys. The staircases are of stone, and numerous hydrants have been placed in convenient positions. The cost of the infirmary has been about £12,500.

## WITH THE TROOPS IN THE SOUDAN.

*(From our Special Correspondent.)*

Base Hospital, Camp near Suakim, March 23rd, 1885.

FOOTSORE, dust-begrimed, and desperately tired, I sit down to write you a few lines from this entrenched spot, as I feel assured any information from the front, however brief, will be welcome from this newly selected battle-field of the African Soudan. Scarcely had I arrived in this port ere private news reached me of a projected advance of our troops in the direction of Tamai, *en route* for Berber. I at once proceeded on foot under a blazing sun to the head-quarters of our camp, situate about a mile from the Arab town, and sought an interview with General Graham, now in command of the troops out here. On inspecting my papers, however (your certificate of appointment as "special" I refer to), he remarked that my credentials were not exactly in order, and explained to me that a properly attested registration certificate should have been obtained from the proper authorities at the Horse Guards, in order to place me on the same footing as other specials accompanying the troops in the field. I explained how hurried my departure had been from England, and after a few minutes' conversation the difficulty seemed to be bridged over, and a very pleasant interview terminated in the Chief of the Staff pointing out the principal medical officer's tent, and referring me to that gentleman for any future instructions for my guidance on the subject. Surgeon-General Barnett at once received me in a most cordial manner, expressed his pleasure at meeting a representative of THE LANCET, and assured me that no obstacle whatever would be placed in my way, but every facility possible afforded for my obtaining any medical or surgical records of such cases as I thought fit to notice, and were likely to interest the profession at large, at the same time handing me a paper (a general order) for my perusal, whereby I was enabled at a glance to ascertain that a very careful disposal of the medical staff had already been made in view of the troops moving westward to confront and give battle to the enemy in the plain.

On Thursday morning last, March 19th, I was aroused at 3 A.M. Hurriedly dressing, partaking of biscuit and a good cup of strong coffee, and then filling my small handbag with a tourniquet, some artery forceps, surgical needles, silk, and such other necessaries likely to be useful, as well as comforting in case of accident or delay on the road, I quitted the easy quarters on board the steamship *Arab*, and proceeded on shore in company with a "special" bent on a representative errand as myself. On arriving at headquarters, we found the column had left the camp about an hour before our arrival, and not being able to secure a horse for myself, I had to part company with my companion and follow General Graham's force to Asheen on foot and alone—a by no means happy prospect, in view of a some seven or eight miles' dusty walk over a sandy desert under the scorching rays of a tropical sun, and in the presence of a subtle, active, and relentless foe. By the time the sun had risen, a light, cool, northerly breeze had sprung up, so that my solitary tramp turned out not quite so unpleasant a one as I expected it would have been. Doing my level best, as they say—some five miles an hour,—I came up with the rearmost of the camel train, in charge of native Indian drivers, and in an hour afterwards I had forged so far ahead that I could easily discern the entire distribution of the force in front, and in two hours from the time of leaving the ship was up with and coming on at a canter with the Brigade of Guards, and felt not much the worse for my long walk. Soon afterwards a halt in front, and an order from the General for the camels and mules to immediately come into square, suggested the probability of a "find," either for refreshment or foe. "Breakfast, I guess," says a sturdy mule-driver close to me, the wish on his part being father to the thought, as our stomachs were by this time empty enough. Not long, however, had we to wait for a decision on this point. An extended line of white-greyish smoke making its appearance over the helmets of the men standing in front of us, and the sharp rattle of musketry heard on our left front face told no uncertain tale, but proclaimed the fact that the enemy were there—more than that, not at bay, but, as their usual custom and valour is, were charging right up to our very front. Cavalry, with their gaily decorated lances, were seen dashing along in one direction, whilst our Guards, the 49th, 53rd, and 70th, were doing their very best pegging away in another. The din of battle proceeded, whilst dust and smoke soon obscured from view nearly everything going on around us. After quitting the camel convoy I had marched on with the Guards, and then joined the hospital and bearer company, hoping to see what wounded were brought in from our front face of the square; but in the hurry and scurry, the confusion and rapidity of movements going on around me, I for a time lost touch of the medical department, and, by getting out of the way of a score or so of refractory camels, suddenly discovered myself outside of the square that had fortunately, and yet quickly, been formed at the base of a small hill to resist the onslaught of a most brave, active, and determined enemy. For some seconds I was at a loss to know what to do. There I stood alone, unattached, and withal perfectly unarmed. I felt for at least once in my life that I had outstepped the bounds of discretion, and had really no business where I was, and further than that, if I remained much longer just at that particular spot looking at the action, and admiring the pluck as well as the dash of our own brave fellows in mounting the spur of the hillock, and carrying up planks and bags to form a zereba, the occasional thinning of the dust cloud and blowing away of the smoke giving me an opportunity now and then of getting a glimpse of what was going on in this tug of war, I myself would be as near as possible in a line betwixt two fires, and form an admirable target for either side which should choose to fire upon me. I was in a dilemma, it is true, having to determine upon one of two dangerous alternatives—either to dash back through the dust and smoke and try to regain the inside of the Guards' square, with the prospect of being mistaken and shot at as an enemy, or make for some safe distance in the rear. Acting on a natural instinct, impulse if you will, and which has stood my friend on many a trying occasion before, I decided for the latter, and at noon exactly started across the plain for Suakim, and the entrenched camp some seven miles away. Two young men, who had come out with the force in the morning, joined me a few minutes afterwards, and I at once felt relieved by their companionship in this retrograde movement on our parts; however, they, like myself, were amateurs, and had come out of camp—just as Easter Monday holiday folk do on Brighton Downs to see what was going on; and one of them had in his possession a large, ugly revolver, which he persisted in carrying in his hand at full cock. As I considered there might possibly be, from inexperience in its use on his part, more danger in this friend than in a foe, it was with no small degree of relief to my feelings that we three parted company, having reached a place of comparative safety about four miles away from the action that was then going on. By 2 P.M. I was inside the West Redoubt, the furthest post out held by the English in the plain, and learnt from the officer in charge, Lieut. the Hon. H. White of the Guards, the great danger I had run in going out, and especially in coming in unarmed over a wide plain that might then actually be in possession of the enemy, who give no quarter, but slaughter every man and beast they meet. From the crow's nest of this redoubt we watched the fight going on; saw that the brave British force had already secured the low hills which dominated the wells; but had formed a zereba as well as established heliographic communication between head-quarters and themselves. By three o'clock the fight was practically over. The gallant 70th were left to hold the zereba, and the remainder of the expeditionary force returned to camp to give the men a good meal, and get a little rest in their entrenched position after a most fatiguing march out, and the gallant exploits of the day.

Poor Lieutenant Dalliston, of the Guards, fell early in the day, shot dead, and very soon afterwards Surgeon Lane, also of the Guards, as gallant a fellow as ever breathed, and as accomplished a young surgeon as ever graced the pages of the Army List, sank to earth pierced by a bullet wound through his left lung. He was very carefully brought back to camp; considerable hæmorrhage meanwhile ensued, and all felt that his wound was desperately dangerous. The following morning he was dying, no possible hopes whatever being entertained that he could live out the day. He breathed his last about two o'clock in the afternoon. Every care and attention was paid him by his medical brethren, but all to no purpose. He passed away in the prime of life and pride of manhood, to give place for others to emulate

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*(From our Special Correspondent.)*

Base Hospital, Camp near Suakim, March 23rd, 1885.

FOOTSORE, dust-begrimed, and desperately tired, I sit down to write you a few lines from this entrenched spot, as I feel assured any information from the front, however brief, will be welcome from this newly selected battle-field of the African Soudan. Scarcely had I arrived in this port ere private news reached me of a projected advance of our troops in the direction of Tamai, *en route* for Berber. I at once proceeded on foot under a blazing sun to the head-quarters of our camp, situate about a mile from the Arab town, and sought an interview with General Graham, now in command of the troops out here. On inspecting my papers, however (your certificate of appointment as "special" I refer to), he remarked that my credentials were not exactly in order, and explained to me that a properly attested registration certificate should have been obtained from the proper authorities at the Horse Guards, in order to place me on the same footing as other specials accompanying the troops in the field. I explained how hurried my departure had been from England, and after a few minutes' conversation the difficulty seemed to be bridged over, and a very pleasant interview terminated in the Chief of the Staff pointing out the principal medical officer's tent, and referring me to that gentleman for any future instructions for my guidance on the subject. Surgeon-General Barnett at once received me in a most cordial manner, expressed his pleasure at meeting a representative of THE LANCET, and assured me that no obstacle whatever would be placed in my way, but every facility possible afforded for my obtaining any medical or surgical records of such cases as I thought fit to notice, and were likely to interest the profession at large, at the same time handing me a paper (a general order) for my perusal, whereby I was enabled at a glance to ascertain that a very careful disposal of the medical staff had already been made in view of the troops moving westward to confront and give battle to the enemy in the plain.

On Thursday morning last, March 19th, I was aroused at 3 A.M. Hurriedly dressing, partaking of biscuit and a good cup of strong coffee, and then filling my small handbag with a tourniquet, some artery forceps, surgical needles, silk, and such other necessaries likely to be useful, as well as comforting in case of accident or delay on the road, I quitted the easy quarters on board the steamship *Arab*, and proceeded on shore in company with a "special" bent on a representative errand as myself. On arriving at headquarters, we found the column had left the camp about an hour before our arrival, and not being able to secure a horse for myself, I had to part company with my companion and follow General Graham's force to Asheen on foot and alone—a by no means happy prospect, in view of a some seven or eight miles' dusty walk over a sandy desert under the scorching rays of a tropical sun, and in the presence of a subtle, active, and relentless foe. By the time the sun had risen, a light, cool, northerly breeze had sprung up, so that my solitary tramp turned out not quite so unpleasant a one as I expected it would have been. Doing my level best, as they say—some five miles an hour,—I came up with the rearmost of the camel train, in charge of native Indian drivers, and in an hour afterwards I had forged so far ahead that I could easily discern the entire distribution of the force in front, and in two hours from the time of leaving the ship was up with and coming on at a canter with the Brigade of Guards, and felt not much the worse for my long walk. Soon afterwards a halt in front, and an order from the General for the camels and mules to immediately come into square, suggested the probability of a "find," either for refreshment or foe. "Breakfast, I guess," says a sturdy mule-driver close to me, the wish on his part being father to the thought, as our stomachs were by this time empty enough. Not long, however, had we to wait for a decision on this point. An extended line of white-greyish smoke making its appearance over the helmets of the men standing in front of us, and the sharp rattle of musketry heard on our left front face told no uncertain tale, but proclaimed the fact that the enemy were there—more than that, not at bay, but, as their usual custom and valour is, were charging right up to our very front. Cavalry, with their gaily decorated lances, were seen dashing along in one direction, whilst our Guards, the 49th, 53rd, and 70th, were doing their very best pegging away in another. The din of battle proceeded, whilst dust and smoke soon obscured from view nearly everything going on around us. After quitting the camel convoy I had marched on with the Guards, and then joined the hospital and bearer company, hoping to see what wounded were brought in from our front face of the square; but in the hurry and scurry, the confusion and rapidity of movements going on around me, I for a time lost touch of the medical department, and, by getting out of the way of a score or so of refractory camels, suddenly discovered myself outside of the square that had fortunately, and yet quickly, been formed at the base of a small hill to resist the onslaught of a most brave, active, and determined enemy. For some seconds I was at a loss to know what to do. There I stood alone, unattached, and withal perfectly unarmed. I felt for at least once in my life that I had outstepped the bounds of discretion, and had really no business where I was, and further than that, if I remained much longer just at that particular spot looking at the action, and admiring the pluck as well as the dash of our own brave fellows in mounting the spur of the hillock, and carrying up planks and bags to form a zereba, the occasional thinning of the dust cloud and blowing away of the smoke giving me an opportunity now and then of getting a glimpse of what was going on in this tug of war, I myself would be as near as possible in a line betwixt two fires, and form an admirable target for either side which should choose to fire upon me. I was in a dilemma, it is true, having to determine upon one of two dangerous alternatives—either to dash back through the dust and smoke and try to regain the inside of the Guards' square, with the prospect of being mistaken and shot at as an enemy, or make for some safe distance in the rear. Acting on a natural instinct, impulse if you will, and which has stood my friend on many a trying occasion before, I decided for the latter, and at noon exactly started across the plain for Suakim, and the entrenched camp some seven miles away. Two young men, who had come out with the force in the morning, joined me a few minutes afterwards, and I at once felt relieved by their companionship in this retrograde movement on our parts; however, they, like myself, were amateurs, and had come out of camp—just as Easter Monday holiday folk do on Brighton Downs to see what was going on; and one of them had in his possession a large, ugly revolver, which he persisted in carrying in his hand at full cock. As I considered there might possibly be, from inexperience in its use on his part, more danger in this friend than in a foe, it was with no small degree of relief to my feelings that we three parted company, having reached a place of comparative safety about four miles away from the action that was then going on. By 2 P.M. I was inside the West Redoubt, the furthest post out held by the English in the plain, and learnt from the officer in charge, Lieut. the Hon. H. White of the Guards, the great danger I had run in going out, and especially in coming in unarmed over a wide plain that might then actually be in possession of the enemy, who give no quarter, but slaughter every man and beast they meet. From the crow's nest of this redoubt we watched the fight going on; saw that the brave British force had already secured the low hills which dominated the wells; but had formed a zereba as well as established heliographic communication between head-quarters and themselves. By three o'clock the fight was practically over. The gallant 70th were left to hold the zereba, and the remainder of the expeditionary force returned to camp to give the men a good meal, and get a little rest in their entrenched position after a most fatiguing march out, and the gallant exploits of the day.

Poor Lieutenant Dalliston, of the Guards, fell early in the day, shot dead, and very soon afterwards Surgeon Lane, also of the Guards, as gallant a fellow as ever breathed, and as accomplished a young surgeon as ever graced the pages of the Army List, sank to earth pierced by a bullet wound through his left lung. He was very carefully brought back to camp; considerable hæmorrhage meanwhile ensued, and all felt that his wound was desperately dangerous. The following morning he was dying, no possible hopes whatever being entertained that he could live out the day. He breathed his last about two o'clock in the afternoon. Every care and attention was paid him by his medical brethren, but all to no purpose. He passed away in the prime of life and pride of manhood, to give place for others to emulate

him in quality and action, as well as to place another lasting testimony on the record of fame that there are men in the non-combatant as well as the combatant branch who are prepared to lay down even their lives, if needs be, in the execution of their duty for their Queen and their country. I had telegraphed to you early in the day of the serious character of his wounds, as well as that of some other officers; but from some misunderstanding on the part of the telegraphic company, all messages now being under a military censorship prior to being sent away, my report, containing ciphers to save expense, was stopped, and handed back to me in consequence.

Our list of casualties in this slight action, and the day day following, when a relieving column was despatched to the zereba, was heavy enough. Sergeant-Major Nicholls was stabbed to death, and some men of the 2nd Scots, 1st Coldstream, and 2nd Grenadier Guards fell mortally wounded by Remington bullets. Major Robertson, of the Bengal Cavalry, was stabbed by a spear very severely. Major Harvey, of the 5th Lancers, received a bad thrust through his left thigh, but is doing well. Most of the wounds were gunshot ones, the rebels not getting within thirty yards of our squares. The injuries inflicted by spear thrusts are simple clean flesh-cuts, the enemy's weapon having a razor-like edge. These wounds under ordinary antiseptic dressing do well, and generally heal by first intention. Their large double-edged sword, used with great force, held in the two hands, and generally aimed at the neck and head, produces most ghastly wounds, severing flesh, vessels, and bones in the course of its descent, and killing its victim outright. No man unhorsed in fight ever escapes the fury of these ruffians, nor lives to tell the tale of a hand-to-hand encounter with their active and brave but relentless, foes. (*Vide* sketch.)

Corpse of a private after falling into the hands of the enemy. One sword-wound in the neck, severing everything through the cervical vertebræ; the rest are spear-wounds on the chest and arm, six in number. (Sketched at Base Hospital, March 23rd, 1885.)

Saturday (21st) was a quiet day as far as the home force was concerned; but much firing was heard in the direction of the Hasheen zereba, although no reports had come in from them until Sunday, the 22nd.

On Sunday (22nd) a large force left the camp before daylight, taking a southerly direction towards Tamai, twelve miles distant. Five or six miles out, the camp, whilst the men were building a zereba, was surprised by a large number of the enemy, and a regular stampede among the camels and camp followers in consequence ensued. The details of this affair must sooner or later reach England, and some explanation will be required to account for the sad loss of life that has taken place amongst the troops and men employed. As I write this an order has reached the Base Hospital from headquarters for the medical staff to be in readiness to receive a large number of wounded from the field. A large and powerful escort has gone out to bring the wounded in. During the whole of this day (Monday, 23rd) Brigade-Surgeon Hinde, assisted by his energetic staff at the redoubt, have been working hard to have everything in readiness to receive them. About 100 are expected. In this camp Surgeon-Major Tanner can accommodate 70 in beds, 20 can be taken in the Auxiliary Hospital at Quarantine Island, whilst 55 could be removed on board the *Ganges*.

The hospital tents are both roomy and airy, being lined with double protective covering overhead, and are square, not bell-shaped, as wrongly described by some correspondent. The operating tent, under the superintendence of Surgeon-Major Tobin, is a picture of comfort, method, and order, and reflects much credit on the indefatigable officer in charge of it.

7 P.M.—Just dusk, and the wounded are being brought in. Poor fellows, I pity them indeed! Their faces, and those of the gallant band who have brought them, are so brown and covered with dust that they are scarcely recognisable; but never mind—comforts, in the shape of a nice bed, good warm soup, hot tea, or even brandy-and-water, await each one, as the necessity of his case demands it. The dressings, moreover, are so carefully adjusted, and the patients seem to have had such good attention in the field, that they will enjoy the comfort of a quiet night before their wounds are further inquired into.

## LIVERPOOL.

(*From our own Correspondent.*)

### MEDICAL FACULTY, UNIVERSITY COLLEGE.

THE vacancy caused by the resignation of Dr. Ewing Whittle, of the chair of Medical Jurisprudence and Public Hygiene, has been filled by the election of Mr. Frank T. Paul, surgeon to the Royal Southern Hospital, and surgical tutor in University College. Mr. Paul possesses eminent qualifications for the chair, having been a pupil of the late Dr. Alfred Swayne Taylor at Guy's Hospital, and having also held the appointment of pathologist to the Liverpool Royal Infirmary, where he was previously resident medical officer for nearly three years. He has personally made upwards of 1000 post-mortem examinations, and was for some time demonstrator of physiology. Altogether, the appointment is one on which the College may be congratulated.

### THE LOCK HOSPITAL: COMPARATIVE RARITY OF SYPHILITIC IRITIS.

At a recent meeting of the Medical Institution, Dr. Bernard, surgeon to the Lock Hospital, read a paper on "The Treatment of Constitutional Syphilis," in which he remarked on the rarity of cases of syphilitic iritis seen in the hospital. The total number of patients treated averages over 600 annually, of whom the larger proportion are suffering from constitutional syphilis. Mr. Shears, senior assistant-surgeon to the Eye and Ear Infirmary, who took part in the subsequent discussion, observed that syphilitic iritis was very frequent among the out-patients of that institution. Subsequent inquiries showed that in a period of ten years (May, 1875, to March, 1885) there had been only seventeen cases observed in the Lock Hospital, and in the majority of these the eye is affected either on admission or very shortly afterwards. A very probable explanation is that the cases seen at the Eye and Ear Infirmary are those of patients who have neglected the primary disease, the influence of mercurial treatment in both preventing and curing syphilitic diseases of the eye in particular, being now undisputed.

### STREET NOISES.

For some years past most of our leading thoroughfares have become insufferably noisy, there being an incessant roar of traffic from a very early hour in the morning until very late at night. The wood pavement does not appear to find much favour with the local authorities, who have only permitted a very limited use of it in the neighbourhood of the Northern Hospital, in Bold-street and part of Church-street, thoroughfares devoted to fashion. The asphalte pavement deadens the sound somewhat, though it has the disadvantage of being very dusty. Medical practitioners, who are obliged to live in or near leading thoroughfares, suffer much from this annoyance, as also from much noise

which might be avoided, such as street music and singing, newsvendors' cries, &c. A recent local Act, which does not appear to be generally known (Liverpool Improvement Act, 1883), contains a section (29) which requires every street musician or singer to depart from the neighbourhood and from within hearing of any householders on being requested to do so by the latter, or any member of his family, or servant, or by any constable. A refusal to comply with this perfectly reasonable request renders the offender liable to a penalty of 40*s*.

CITY CHURCHYARDS.

This city contains within its corporate boundaries a large number of intra-mural churchyards and cemeteries which, since the year 1854, have been closed absolutely against all interments. Their appearance, until very recently, has been dismal in the extreme, presenting a dreary outlook of neglected graves and tombstones, while some have been made the receptacle for all the refuse of the adjoining street. Some years ago the incumbent of St. James's Church, Toxteth-park, the churchyard of which was in a most disgraceful condition, took steps to improve it, including the planting of trees. The experiment has proved both successful and contagious, other churchyards and cemeteries having been planted with trees and made into recreation-grounds. Another churchyard, St. Luke's, is now being laid out; and it is probable that in the course of years every intra-mural burial-ground will have been similarly transformed. This will conduce greatly to the health and comfort of the inhabitants in their neighbourhood.

THE ROYAL SOUTHERN HOSPITAL.

At the Royal Southern Hospital there are several cases of operation for the removal of new growths, under the care of Mr. Paul. A recurrent melanotic sarcoma of the neck, primary in a submaxillary gland, is worthy of note. The original growth was removed two years ago from a man aged forty-eight; he has since been in good health, but the recurrence was very extensive and deep, so that, although the wound is healing well, the ultimate prospect is not encouraging. Among the most interesting are two cases of carcinoma of the antrum, involving removal of the whole of the upper jaw and contents of the orbit. Mr. Paul refers to six cases of this nature which he has recently met with, all of them presenting the same clinical history, and one which enables the diagnosis from sarcoma to be made without reference to the microscope. In all, the first symptom noticed by the patient was a formation high up in the nostril on one side, which easily bled and gave rise usually to some unpleasant discharge; subsequently, at the inner angle of the orbit, a small soft tumour grew, displacing the eye, and this was the immediate cause of the patient's applying for admission to hospital. In no case was the antrum distended, as in sarcoma. The growth evidently began in the mucous membrane of the antrum, fungated into the nostril, and then spread up, probably along the nasal duct, to the inner angle of the orbit. Microscopically, two of the cases were of the ordinary squamous epithelioma, and the remaining four the normal cylindrical-celled carcinoma of this part. Both the patients have recovered temporarily from this extensive operation, but one already has a recurrence. An epithelioma of the back is another case not very common; and two old cases, come up to show themselves in good health, were encouraging—one, an excision of the rectum for cylindrical epithelioma nearly four years ago, still free; the other, a colotomy for the same growth in the sigmoid flexure of the colon six months ago. Mr. Paul has two cases of compound fracture of the leg into the ankle-joint, in which very good results have been obtained by treatment with his splint and wiring the bones; and two or three cases of talipes, in his splints, undergoing a gradual improvement.

## NORTHERN COUNTIES NOTES.

(*From our own Correspondent.*)

HEALTH LECTURES AT MORPETH.

A COURSE of six lectures of a popular nature has been commenced at Morpeth, and it is satisfactory to know that the public have taken a considerable interest in the matter, as evinced by an attendance which is said to have fully tested the capacity of the Town Hall. A few years ago a popular lecture by one of our professional brethren was a rare event in the North, and only "the leading men" ventured to address the public, and then on non-professional subjects as a rule. Now the younger members come forth, to the great advantage of the public, who desire, and will have, medical information and light on sanitary subjects. The first lecture was by Dr. David Drummond of Newcastle, and his subject, "House Sanitation," was ably treated, dwelling with force and lucidity on the importance of ventilation and drainage, and giving a number of very striking illustrations of how such diseases as scarlet and typhus fevers and consumption were generated by neglect of the principles laid down. The second lecture was given by Dr. Byrom Bramwell of Edinburgh (whom we claim here as a Tynesider); his subject, "Common Diseases, their Cause and Prevention," was very ably treated, and the Hall, if possible, was more crowded than on the former occasion. It is as well to mention, as bearing on the success of these sanitary lectures, that the experiment was tried, which has proved so successful, of charging one penny for admission to each lecture. This has been shown to be a better plan than free admission; for what people get for *nothing* they generally attach little or no value to.

THE CHLORAL HABIT.

A very distressing case has occurred in Durham City since my last letter. A lady, the wife of a prominent citizen, was found dead in her bed. It was stated at the inquest that she suffered from sleeplessness, for which she was in the habit of taking chloral without medical advice, and it was shown that death had taken place "from syncope, accelerated by chloral, self-administered."

AN EXAMPLE FOR TRAVELLERS IN SUNNY LANDS.

Sir George Elliott, Bart., M.P., has sent large boxes of beautiful flowers from the south of France to Durham County Hospital, Sunderland Infirmary, and Newcastle Infirmary, with instructions that they should be dispersed amongst the sick wards. Sir George has frequently shown his sympathy with the sick poor of the north before, but I venture to say this last act of his will be felt by them as most graceful and considerate.

MEASLES AND RÖTHELN IN THE NORTH.

There is now rather a smart epidemic of measles prevalent at Gateshead. I have heard of as many as forty pupils in one school being absent from this cause. Several adults have been attacked, and, as usually observed, have suffered more severely than children. Some cases have been evidently of the character of rötheln; but as a rule the epidemic has not shown the severity nor the fatality of the Sunderland outbreak, which, I regret to say, still prevails in a bad form in that borough.

TRIPLETS IN THE NORTH.

Since the New Year set in several cases of triple births have occurred in the north, both sides of the Tyne having received augmentation to their population in this way, and also some of the mining districts of Northumberland. If we suppose that the usual midwifery statistics are correct as showing triple births to take place once to every 6000 cases, we must allow that the experience of Mr. John Foggin, a young surgeon in practice here, has been quite unusual, for many practitioners will not have a case of triplets in a lifetime, while Mr. Foggin has had a case on January 8th last, two boys and a girl born alive; and again on March 28th, three boys born alive, and still living. I believe Mr. Foggin has been successful in obtaining the Royal Bounty for the first case, and is also hopeful of getting it for the last; both have occurred in the wives of poor and industrious people.

Newcastle-on-Tyne, April 6th.

## PARIS.

(*From our Paris Correspondent.*)

THE SUSPECTED ARSENICAL POISONING CASE.

IN my letter of Jan. 31st I gave an account of a suspected case of poisoning by arsenic. The supposed criminal, whose name is Eel, and a clockmaker by trade, is soon to appear before the Court of Assizes of the Seine. The trial promises to be most interesting, and at the same

time most perplexing, as the preliminary examination has been before the magistrates and medical jurists. Owing to the mysterious disappearance of the maid-servant of the accused man, a stove in which he is strongly suspected of having burnt the body of his victim, or perhaps victims, was seized; but as the dimensions appeared somewhat too small for the execution of his purpose, the medical experts had one made exactly like it, and by way of experiment burnt the corpse of a human adult in it. They were greatly surprised at the rapidity and completeness with which the body (previously cut up) was consumed. In fact, it might be used as a crematory. That belonging to the accused, which was rather primitive and unique of its kind, is supposed to have been devised by himself, and has been carefully preserved in the same condition as when found, as it will necessarily be brought forth as evidence against him. Although very small, yet the mouth of the stove was found large enough to admit a man's head, entire. It has also been noted that Pel followed very assiduously, and for a long time, the course of Medical Jurisprudence delivered by Professor Brouardel at the Morgue. Another crushing circumstance against the accused is that when the examining magistrate observed to him that arsenic was found in the body of his first wife, which was exhumed, he replied that that was not astonishing, as she had been treated for two years with arsenic; but it has been ascertained that none of the medical men who attended her had prescribed that substance, nor did any of the prescriptions made up at the pharmacies for her contain it.

REMOVAL OF A CANCEROUS KIDNEY.

Dr. Péan, one of the most daring French surgeons of the day, and a well-known ovariotomist, submitted to the Academy of Medicine last week the case of a patient (an English lady) from whom he had removed a cancerous kidney about fourteen months ago. Dr. Péan had seen the patient six years previously, but he did not then consider the case ready for any operative measure. She had in the interim consulted some of the most eminent surgeons in London, who declared, in response to her desire for an operation, that it was impracticable. She then came to Paris to consult Dr. Péan again, and when he saw her about fourteen months ago, he found her in the last stage of marasmus, and the tumour occupied as much of the abdomen as would a nine months' gravid uterus. The removal of the tumour was decided upon by gastrotomy, and the operation was effected by making an incision through the abdominal walls, along the linea alba from the pubes up to the epigastric region. The tumour was removed with some difficulty, and was found to weigh six kilogrammes, or about thirteen pounds, and the whole operation occupied a little more than an hour. It is, however, a pity that Dr. Péan did not mention whether the operation was performed under the influence of chloroform or other anæsthetic, or whether antiseptics were employed or not. Professor Charles Robin, who examined the tumour histologically, pronounced it to be an epithelioma of the kidney. Dr. Péan stated that, although the operation was performed about fourteen months ago, he did not then wish to submit the case to the Academy, as he was afraid of an early relapse. This, however, has not occurred; the general state of the patient has never failed to improve from the commencement, and the remaining kidney has been found sufficient to produce the normal quantity of urine. The urine of the patient was lately examined by M. Méhu, an eminent chemist, who declared that it was of the same chemical and histological constitution as that of women in health.

THE HEALTH OF THE ARCHBISHOP OF PARIS.

The Archbishop of Paris, who was reported to be suffering from bronchial catarrh, is now officially pronounced by his medical attendant to be out of danger, and notwithstanding his advanced age (his Eminence being an octogenarian), every hope is entertained of his recovery.

Paris, April 7th.

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ANONYMOUS letters containing threats to blow up Netley Hospital with dynamite have recently been received by the Commandant and other officials of that institution. A few nights ago a package, which was immediately destroyed, was found in the vicinity of the hospital, and since then increased vigilance has been shown, and the force of military police stationed at the hospital has been increased.

## THE ROYAL COLLEGE OF SURGEONS.

AT a quarterly meeting of the Council, held on Thursday last, the minutes of the last meeting were confirmed.

The thanks of the Council were given to Mrs. Fairlie Clarke for the presentation of drawings, &c., illustrating Diseases of the Tongue, which had been prepared by her late husband.

No essay was received for the Jacksonian Prize. The subject for next year is to be the Pathology, Diagnosis, and Surgical Treatment of Diseases of the Thyroid Gland.

Mr. E. H. Fenwick, of the London Hospital, was elected an Examiner in Physiology under the combined scheme.

The Committee of Charters and Bye-laws presented their report, the reproduction of which we must defer till next week. It was agreed that the Association of Fellows and Members be informed that the College is about to proceed to get the necessary charters and bye-laws drawn up.

The question of recognition by the College of the vaccination certificates granted at Belfast, having been again raised by a letter from Professor Redfern, was referred to a select committee.

A request from the Western University, London, Ontario, to have its teaching recognised, was referred to a committee of management of the two Colleges.

Mr. Durham gave notice of the following motion, to be brought forward at the next meeting of the Council: "That seven delegates from this College be appointed, with authority to invite an equal number of delegates from the Royal College of Physicians, to meet and confer upon what steps, if any, can be taken to enable the two Colleges to obtain the legal right of giving the title of Doctor to persons who shall have obtained the licence of the Royal College of Physicians of London, and the diploma of Member of the Royal College of Surgeons of England."

## MAHOMED MEMORIAL FUND.

THE following additional subscriptions have been received:—

| | £ | s. | d. | | £ | s. | d. |
|---|---|---|---|---|---|---|---|
| Dr. Edward Chisholme (Sydney) ... ... ... ... | 5 | 0 | 0 | Albert Martin, Esq., M.B. | 5 | 0 | 0 |
| | | | | T. D. Ransford, Esq. ... | 1 | 1 | 0 |
| Dr. Arthur Evershed ... | 1 | 1 | 0 | A. H. Tubby, Esq. ... ... | 2 | 2 | 0 |
| H. Lund, Esq. ... ... ... | 1 | 1 | 0 | | | | |

A meeting of the General Committee will be held in the Governors' Court-room, Guy's Hospital, on Thursday, April 16th, at 4.30 P.M., to receive the report of the Executive Subcommittee, and to consider how best to make use of the fund.

ARTHUR E. DURHAM, Treasurer.
JAMES F. GOODHART, } Secretaries.
W. H. A. JACOBSON, }

## COUNTY COURT, CROYDON.

### MEDICAL FEES FOR NECROPSIES IN WORKHOUSES.

*In re* DONBAVAN *v.* MORRISON.

MR. W. J. FRASER, who appeared for the plaintiff, having stated the facts, contended that it formed no part of the duty of the medical officer of the Croydon Workhouse and Infirmary to make a post-mortem examination of the deceased's body. The case was properly reported to the coroner's officer, who, having deemed an inquiry necessary after consulting the coroner, the medical officer not being certain as to the actual cause of death, was ordered by the coroner to make a post-mortem. It was no part of such medical officer's duty to make such examination at the coroner's request. He was not remunerated for it. Indeed, prior to the appointment of the present (recently elected) coroner, his predecessor, Mr. Carter, had for years paid the fee. The workhouse and infirmary were not public institutions within the meaning of the Act. They were exclusively maintained at the expense of the ratepayers of the union, and were for destitute persons and none others. Unless a person was destitute, or in fact a pauper, there was no right whatever on the part of such person to receive treatment

therein. No person could be treated in a workhouse infirmary without becoming a pauper. The plaintiff was therefore the medical officer of a pauper, and not of a public, institution. A coroner had no more right to call upon the medical officer of a workhouse to make a post-mortem without paying the stipulated fee than he had to require the ordinary medical practitioner to do so, who might have been casually called in to attend upon a person upon whose body an inquest had to be held, and also a post-mortem. A public hospital or infirmary was an institution open for the reception of any person, no matter what might be his or her rank in society who sought its aid and could be cured therein. The word "public" was general in its application, and applied to all classes of persons, whereas a workhouse and infirmary was only for the pauper and no other. The word "public" meant public generally, and not any section such as the destitute and the pauper. In conclusion, Mr. Fraser saw that, whether the object for which the statute was passed, the mischief at which was aimed, the plain and natural interpretation of the language used, or the fact that workhouses were not mentioned or even referred to, was regarded, no other conclusion could be come to other than that the plaintiff was entitled to his fee, and it would be a manifest injustice to compel him to go without it, and to give that to him would be in accordance with the practice which had for the most part prevailed since the passing of the Act in 1841, and in harmony with the opinion of the Poor-law Board (now the Local Government Board), which was by no means an unworthy authority.

The judge, Mr. Lushington, gave a verdict for the defendant, with costs on the higher scale, alleging as the grounds for his decision that a workhouse infirmary was a public institution within the meaning of the section.

Mr. Fraser thereupon applied for a case for appeal, which the judge assented to.

# Obituary.

## JAMES WHITEHEAD, M.D., F.R.C.S.

WE regret to record the death on the 3rd inst., at Sutton, Surrey, from cancer of the œsophagus, of Dr. James Whitehead, late of Manchester, in the seventy-fourth year of his age. The deceased, who was a native of Oldham, obtained his professional education at Manchester, Westminster Hospital, and Paris. In 1845 he obtained the diploma of Fellow of the Royal College of Surgeons of England, in 1850 the degree of M.D. from the University of St. Andrews, and was elected a Member of the Royal College of Physicians of London in 1859. He was also a member of various British and foreign scientific societies. Previous to its union with Owens College, Dr. Whitehead was lecturer on Obstetrics at the Royal School of Medicine, Manchester, and some years ago held the position of senior officer in ordinary at St. Mary's Hospital, and also that of Demonstrator of Anatomy. Amongst his published works are: "Diseases of the Uterine System," "Hereditary Diseases," "The Wife's Domain," "The Rate of Mortality in Manchester," and "Reports of the Manchester Clinical Hospital;" he also contributed various papers to the medical journals. In conjunction with the late Dr. A. Schoeff-Merei, Dr. Whitehead was a founder of the Manchester Clinical Hospital.

## THOMAS HOWKINS, M.R.C.S.

MR. THOMAS HOWKINS died of heart disease at Torquay, in the fifty-fourth year of his age, on the 29th ult. His career as a medical student at University College, London, was a distinguished one. He gained, amongst other honours, the gold medal in Professor Erichsen's class of surgery; and, after obtaining the membership of the Royal College of Surgeons, established himself as a dental surgeon in Birmingham. Here he soon rose to leading practice, was appointed dental surgeon to the Children's Hospital, and more recently lecturer on Dental Physiology and Surgery at the Queen's College. For some years Mr. Howkins was one of the members of the Council of the latter institution; and when the local practitioners of dental surgery formed a Society for their specialty, Mr. Howkins was called to the presidential chair. His opening address was characteristic of him, as an accomplished surgeon and an eloquent speaker. He held one of the highest positions, as a philanthropic worker, in the Masonic brotherhood, and is sincerely mourned in a wide circle of devoted relatives and friends.

# Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 2nd inst.:—

Burd, George Frederick, St. Bartholomew's Hospital.
Rowlands, Thomas Frederic Watkin, Guy's Hospital.
Whitwell, Alfred Frank, St. Bartholomew's Hospital.

DR. E. B. TRUMAN has resigned his office as public analyst to the borough of Nottingham.

THE eminent zoologist, Karl Theodore Ernest von Siebold, Professor at the Munich University, has just died at Munich.

MEDICAL MAGISTRATE.—Dr. Henry G. Thompson has been appointed a Justice of the Peace for the borough of Croydon.

VACCINATION GRANT.—Mr. W. Hood, of Castlegate, York, has received the Government grant for successful vaccination (third time).

ON the 31st ult., the foundation-stone of the new sanatorium for Hull, now in course of erection, was laid by Dr. King, Sheriff of the town.

THE Prince of Wales has consented to preside at a dinner in aid of the funds of the North London or University College Hospital, on May 13th.

AN additional ward to the Birkenhead Corporation Fever Hospital was opened on the 31st ult. The erection has involved an expenditure of about £600.

IT is stated that the first report of the Royal Commission on the Housing of the Working Classes has been agreed to, and that it is now in the hands of the Government printers.

THE SHOEBURYNESS DISASTER.—A testimonial is to be presented to Mrs. Long, of the Prittlewell Sick Nursing Fund, upon whom rested the burden of nursing the sufferers from the late disaster at Shoeburyness.

ROYAL COLLEGE OF SURGEONS OF ENGLAND—At a meeting of the Council on the 9th inst., Mr. Edwin Hurry Fenwick, F.R.C.S. Eng., Assistant-Surgeon to the London Hospital, was elected Examiner in Elementary Physiology.

ARRANGEMENTS have been completed for a "Conference on Education under Healthy Conditions," which is to be held in Manchester from April 14th to the 17th inclusive. The conference will be under the presidency of Lord Aberdare.

PARKES MUSEUM.—A lecture was delivered in this institution on the 26th ult. by Mr. Fletcher, of Warrington, entitled "Smokeless Houses and Manufactories." The lecture was followed by a discussion, in which Dr. Coffin, Mr. Coles, and others took part.

IN reference to the present movement to enlarge the Royal Surrey County Hospital, it has been suggested that the children's ward of the new wing might be specially termed the "Gordon Ward for Children," as a memorial of the hero of Khartoum.

AT the recent annual meeting of the Margate Royal Sea-bathing Infirmary for Scrofula, the directors' report stated that the infirmary is approaching its centenary, and they appeal to the public for increased subscriptions in order that the iexpenditure arising from the recent extensions of the building may be met.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—The annual general meeting of the members of this Society was held on the 7th inst., when the president, Dr. Norman Kerr, who occupied the chair, delivered an address, in the course of which he stated that the Association now numbered 279 members. A paper was then read by the secretary, Dr. W. M. Sturrock, contributed by Mr. Crother, of Hertford, Connecticut, honorary secretary of the American Society for the Study and Cure of Inebriety, entitled "The Incipient Stages of Inebriety." A discussion followed, in

the course of which Dr. Farquharson, M.P., pointed out the difficulty of any legislative measures, and also asked for the results of the treatment in the Dalrymple Home for Inebriates. The chairman, in reply, stated that it was difficult to arrive at any satisfactory results from the statistics, as they had only been in existence for about a year; but that of the 49 cases treated in the Home, 50 per cent. of them had remained steadfast and had been restored to their ordinary careers, and 29 per cent. had been greatly benefited. The discussion was continued by Dr. James Stewart, Dr. Morton, and others.

ACTING on the suggestion of a scientific journal in Germany, that neutral tints are beneficial to the eyesight, an enterprising publisher in that country has just issued a book printed in dark-blue ink on pale-green paper.

PRIZE ESSAYS.—The following questions are selected by the Spanish Society of Medical Hydrology as subjects for prize essays, to be sent in by November, 1886:—1. Physical and Clinical Research on the Sulphuretted-Soda Natural Mineral Waters of Spain, and Comparison of Spanish Springs with the principal Foreign Springs. 2. Pathogenic conception of Pellagra, and its Mineral Water Treatment. The prize is £20, and the essays are to be written in Spanish, Portuguese, or French, and are to be signed with a motto only, and accompanied by a sealed envelope bearing the motto outside and the name and address of the author inside. The address of the secretary of the Society is Costanilla de los Angeles 13, Madrid.

MELBOURNE HOSPITAL.—At the annual meeting of the governors of this institution on January 28th, it was stated that the total receipts during 1884 for the purposes of maintenance amounted to £24,302, and the expenditure to £23,277. The number of in-patients admitted was 3334, and of out-patients 13,009. The mortality in the wards was 10·7 per cent., more than one-fourth of the total number of deaths being due to phthisis; and the medical superintendent, in his report, having urged that provision should be made for the treatment of consumptives away from the metropolitan hospital, in the purer air of the country, it was unanimously resolved that steps ought to be taken by the committee of management to carry out the suggestions of the medical superintendent with reference to the removal of phthisical cases, either by establishing a separate institution in the country, or by arrangement with some other institution for their reception.

ROYAL COLLEGE OF SURGEONS IN IRELAND.—At a special supplementary examination, held on Monday, March 16th, and following days, the following gentlemen were successful:—First Professional Examination: T. P. Connolly, C. D. Jones, R. Jones, J. H. Lovely, H. M'Carthy, R. Martin, T. O'Brien, E. O'Neill. Seven were rejected. Second Professional Examination: G. P. Carte, T. G. Goodman, C. M'Donnell, P. J. F. O'Brien, J. C. O'Donnell, J. O'Sullivan, A. V. Shine. Eleven were rejected. Third Professional Examination: W. A. Johnston. At the First Half Examination for the Letters Testimonial of the College, held on March 23rd and following days, the undermentioned gentlemen were successful:—J. A. C. Coen, A. R. T. Craig, I. Duncan, J. D. O'D. Egan, R. Elliott, E. W. Hamilton, J. C. Hines, A. M. Hunt, E. B. Kennedy, A. D. Macleod, A. E. Murphy, V. Nash, H. F. C. Pilcher, J. A. Scully, A. F. Smith, P. Stevenson, W. Stritch, W. Swan, W. E. Waters, J. A. Whitty, T. D. Wylie. Twenty-five were rejected.

# Medical Appointments.

*Intimations for this column must be sent* DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BARRETT, W. A. H., L.S.A.Lond., has been appointed Assistant House-Surgeon to the Royal Albert Hospital, Devonport.

BOURNS, N. WHITELAW, M.D.Brussels, L.R.C.P.Ed., M.R.C.S., has been appointed Assistant-Surgeon to St. John's Hospital for Skin Diseases, vice Mr. Palmer, resigned.

CAMPBELL, CHARLES M., M.D., C.M., L.R.C.S.Ed., has been appointed Assistant-Physician to St. John's Hospital for Skin Diseases, vice Dr. Boothby Dow, elected a Physician.

DOW, H. BOOTHBY, M.D. St. And., M.R.C.S., has been appointed a Physician to St. John's Hospital for Skin Diseases, vice Dr. Oates, elected a Vice President.

DOWNES, HOWARD, L.R.C.P.Lond., M.R.C.S., has been appointed House-Surgeon to the Victoria Hospital for Children, Chelsea, vice F. H. Hawkins, M.B., C.M., resigned.

DUNCAN, P. T., M.D., B.S.Lond., has been appointed Surgeon to the Croydon General Hospital.

DUNN, HUGH PERCY, F.R.C.S.Eng. (Assistant Ophthalmic Surgeon), has been appointed Pathologist to the West London Hospital.

GLASSINGTON, CHARLES W., M.R.C.S., L.D.S. R.C.S.Ed., has been appointed Lecturer on Dental Materia Medica to the National Dental College, Great Portland-street.

HARRISON, EDWARD, M.A., M.B.Cantab., has been appointed House-Surgeon to the Royal Infirmary, Hull.

JACKSON, HENRY, M.R.C.S., L.S.A.Lond., M.O.H., has been appointed Honorary Surgeon to the North Devon Infirmary, Barnstaple, vice Dr. Perine, deceased.

LEICESTER, AMBROSE WILLIAM MONTAGUE, M.B., C.M., has been appointed Medical Officer for the Second District of the Eastbourne Union, vice Harold Arthur Tuxford, deceased.

LYNDON, THOMAS, B.Ch.Dub., has been appointed Surgeon to the Wicklow County Infirmary.

MOLYNEUX, HAROLD JOSEPH, L.R.C.P.Ed., M.R.C.S., has been appointed Medical Officer for the Upholland District of the Wigan Union, vice J. L. Molyneux.

MORTIMER, J. D., M.R.C.S., L.S.A.Lond., has been appointed Assistant Medical Officer to the Portsmouth Borough Asylum, vice James Neil, M.D., C.M., resigned.

MURRAY, C. STORMONT, L.R.C.S. &c., has been appointed Administrator of Anæsthetics to the Samaritan Free Hospital.

PRONGER, CHARLES ERNEST, L.R.C.P.Lond., M.R.C.S., has been appointed Honorary Surgeon to the North Devon Infirmary, Barnstaple, vice C. H. Gamble, resigned.

SANCTUARY, THOMAS, M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer to the Workhouse and Fourth District of the Alderbury Union, vice Gowing.

WAINEWRIGHT, BENJAMIN, M.B., C.M.Ed., F.R.C.S.Eng., has been appointed Assistant-Surgeon to the West London Hospital, vice Albert Boyce Barrow, M.B.Lond., F.R.C.S.Eng., resigned.

# Births, Marriages, and Deaths.

## BIRTHS.

GABBETT.—On the 26th ult., at Gibraltar, the wife of Surgeon-Major Poole R. D. Gabbett, Medical Staff, of a daughter.

HICKEY.—On the 5th ult., at the Royal Naval Hospital, Esquimalt, British Columbia, the wife of Staff-Surgeon L. Canning Hickey, M.B., of a daughter.

HUNT.—On the 3rd inst., at Queen's-road, Dalston, the wife of Joseph W. Hunt, M.D.Lond., of a son.

ILLINGWORTH.—On the 31st ult., at 1, Crowther-terrace, Clayton-le-Moors, the wife of C. R. Illingworth, M.D., of a daughter.

PARAMORE.—On the 1st inst., at Hunter-street, Brunswick-square, W.C., the wife of Richard Paramore, M.D., of a son.

RICHARDS.—On the 1st inst., at 38, Arundel-square, Barnsbury, N., the wife of C. C. Richards, M.D., of a son.

## MARRIAGES.

CHAMP—SCHAEFFER.—On the 4th inst., at Holloway Chapel, London, John Howard Champ, M.D.Lond., son of J. Champ, Esq., of Chelmsford, to Josephine, eldest daughter of the late Joseph Schaeffer, of Heidelberg.

DUNLOP—GALT.—On the 8th inst., at the Alexandria Hotel, Bath-street, Glasgow, by the Rev. Fergus Ferguson, M.A., of Queen's-park U. P. Church, and the Rev. D. W. Forrest, M.A., of Hamilton, Thomas C. Cameron Dunlop, M.B., C.M., of Newmilns, Ayrshire, to Amy, second daughter of W. M. Galt, Esq., of The Brook, Enniskillen, Ireland.

YEATMAN—BROWNE.—On the 12th Feb., at St. Luke's Church, South Melbourne, by the Rev. R. B. Dickinson, John W. Yeatman, M.R.C.S.Eng., son of the Rev. E. K. Yeatman, M.A.Oxon., of Auburn, South Australia, to Katherine Maude, fourth daughter of the late John E. Browne, of Northcote, Melbourne.

## DEATHS.

BOND.—On the 2nd inst., at Mentone, France, George Weddall Bond, M.R.C.S., third son of the late Rev. R. Bond, Rector of Pulham St. Mary the Virgin, Norfolk.

HOWKINS.—On the 20th ult., at Torquay, Thomas Howkins, M.R.C.S., late of Bennett's-hill, Birmingham.

POPE.—At South-crescent, Bedford-square, Joseph John Pope, M.R.C.S.

SANKEY.—On the 27th Jan., on board the *Chimborazo*, in the Red Sea, from inflammation of the lungs, George Sankey, M.R.C.S. & L.S.A.Lond., of Maidstone, aged 54.

STURGE.—On the 2nd inst., at Rue Longchamp, Nice, Emily Bovell Sturge, M.D. Paris, Officier d'Académie, daughter of the late John Roache Bovell of Demerara, and wife of William Allen Sturge, M.D.

WHITEHEAD.—On Good Friday, the 3rd inst., at his residence, Fairlands, Sutton, Surrey, James Whitehead, M.D., late of Mossley-street, Manchester, in his 74th year.

WILKIE.—On the 3rd inst., at Paris, David Elliot Wilkie, M.D., of Rathobyres, third son of the late Rev. Daniel Wilkie of Rathobyres, Minister of New Grey Friars, Edinburgh.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.*

# Medical Diary for the ensuing Week.

## Monday, April 13.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M. Mr. J. Bland Sutton: Injuries and Diseases of the Jaws in Wild Animals.—Casual communications by Messrs. W. A. Hunt, Wenland Pedley, A. S. Underwood, and F. H. Weiss.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Whipham: A case of Myxœdema with the Microscopical Appearances of some of the Organs.—Dr. Hughes Bennett: A case of Brachial Monoplegia due to a Lesion of the Internal Capsule.

## Tuesday, April 14.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

ROYAL INSTITUTION.—3 P.M. Prof. Gamgee: Digestion and Nutrition.

ANTHROPOLOGICAL INSTITUTE OF GREAT BRITAIN AND IRELAND.—8 P.M. Dr. J. G. Garson: On the Inhabitants of Tierra del Fuego.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. Lunn and Dr. Benham: Case of Aneurysm of Abdominal Aorta, distal compression for four hours and three-quarters under chloroform, cure of aneurysm, death from gangrene of jejunum on the eleventh day.—Mr. Henry Morris: A case of Aneurysm of the Abdominal Aorta leading to Gangrene of the Lower Extremity.—Dr. Beevor: Two cases (Progressive Muscular Atrophy and Infantile Paralysis) illustrating the Localisation of Motor Centres in the Brachial Enlargement of the Spinal Cord.

## Wednesday, April 15.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

MEDICAL OFFICERS OF SCHOOLS ASSOCIATION.—3 P.M. Mr. R. Brudenell Carter: Eyesight in Schools.

## Thursday, April 16.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Tyndall: Natural Forces and Energies.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Dr. R. W. Burnet: Cases of Ulcerative Endocarditis, with remarks.—Mr. J. Ernest Lane: Hæmophilia.

## Friday, April 17.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

SOCIETY OF MEDICAL OFFICERS OF HEALTH.—7.30 P.M. The Council will present a report on the Rivers Pollution Bill and the Water Companies Regulation of Powers Bill.—Dr. Thomas Stevenson: Sewage Disposal.

ROYAL INSTITUTION.—9 P.M. Prof. S. P. Langley: Sunlight and the Earth's Atmosphere.

## Saturday, April 18.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. W. Carruthers: Fir-trees and their Allies.

## METEOROLOGICAL READINGS.

*(Taken daily at 8.30 a.m. by Steward's Instruments.)*

THE LANCET OFFICE, April 9th, 1885.

| Date. | | Barometer reduced to Sea Level and 32° F. | Direction of Wind. | Dry Bulb. | Wet Bulb. | Solar Radia in Vacuo. | Max. Temp. Shade. | Min. Temp | Rain fall. | Remarks at 8.30 A.M. |
|---|---|---|---|---|---|---|---|---|---|---|
| Apl. | 3 | 30·26 | N.E. | 46 | 39 | 96 | 52 | 34 | ... | Bright |
| ,, | 4 | 30·09 | E. | 42 | 38 | 94 | 51 | 34 | ... | Cloudy |
| ,, | 5 | 29·82 | E. | 45 | 40 | 82 | 50 | 34 | ... | Cloudy |
| ,, | 6 | 29·34 | W. | 45 | 43 | 91 | 54 | 43 | ·16 | Cloudy |
| ,, | 7 | 29·41 | E. | 41 | 40 | 90 | 55 | 37 | ... | Overcast |
| ,, | 8 | 29·55 | N.E. | 42 | 40 | ... | 45 | 40 | ... | Cloudy |
| ,, | 9 | 29·56 | N.W. | 43 | 40 | ... | 45 | 40 | ... | Overcast |

# Notes, Short Comments, & Answers to Correspondents.

*It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.*

*All communications relating to the editorial business of the journal must be addressed "To the Editor."*

*Lectures, original articles, and reports should be written on one side only of the paper.*

*Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.*

*We cannot prescribe, or recommend practitioners.*

*Local papers containing reports or news-paragraphs should be marked.*

*Letters relating to the publication, sale, and advertising departments of* THE LANCET *to be addressed "To the Publisher."*

### NEW FARINACEOUS SEED.

A LETTER from M. Sacc of Cochabamba to the Paris Academy of Sciences reports upon a new alimentary substance the composition of which is remarkable. The seed which is richest in nitrogenised substances is that of the Bolivian cotton tree. Its analysis shows 23·70 per cent. of fibrine and 6 per cent. of caseine. When ground, there is only 3 per cent. of loss, a yellow flour being 56½ per cent., and a black bran 40½ per cent. M. Sacc remarks that this flour ought to be particularly suitable for pastry, as it would to some extent replace milk. It is also of service in sugar manufacture, as a substitute for carbonic acid. It is likewise good for sweets, &c. As the production of cotton seed is very large, its utilisation would be of great alimentary importance.

*Dr. C. Morfit.*—We will try to find a place for the article in an early number.

### "EFFECTS OF HANDLING DYNAMITE."

*To the Editor of* THE LANCET.

SIR,—Surgeon-Major Colson's letter on this subject reminded me of having read of the same thing before; and on referring to my notes I find that Dr. Colquhoun (*Australian Medical Journal*, June, 1861) found symptoms of this kind result, as he believed, from the vapour of imperfectly consumed nitro-glycerine in the air of mines where dynamite was used, and that Dr. R. B. Nevitt (*Canadian Journal of Medical Science*, February, 1863) reported the case of a man aged forty, a contractor, in the habit of using dynamite cartridges, who suffered from headache, tinnitus, and palpitation, which symptoms disappeared when he took the precaution to wear gloves and avoided a previous trick of tasting his fingers with his tongue to see if all the dynamite was washed off. I think it is very doubtful if nitro-glycerine acts through the skin or the atmosphere; and I would suggest that the utmost caution should be used to prevent actual contact of the dynamite with the eyes or mouth, which may easily occur if the user is not forewarned of the danger.

I am, Sir, yours obediently,

Birmingham, April 4th, 1885. ROBERT SAUNDBY, M.D.

*To the Editor of* THE LANCET.

SIR,—In reply to Surgeon-Major Colson's note, "dynamite headache," as it is called, is very similar to that produced by amylic nitrate, and, so far as I know, is inseparable from the use of the explosive, until immunity is produced either by prolonged use or idiosyncrasy; but no permanent injury results. With regard to the cure, there is none, except cessation from working with it; but brandy-and-water will mitigate it, and sleep generally remove it. Some physiological notes were published in THE LANCET some time ago.

I am, Sir, yours faithfully,

WALTER WICKHAM,

Surgeon to Nobel's Explosives Co., West Quarter Factory.

Polmont Station, N.B., April 6th, 1885.

### THE INDEX MEDICUS.

As announced in a recent issue, the publication of the Index Medicus will be continued by Mr. G. S. Davis of Detroit. On account of the delay required to perfect the new arrangement, the first number of the journal for the current year will comprise the literature of January, February, and March, after which it will appear monthly as usual. At the end of the year, in addition to the usual annual index of names, subscribers will be furnished with an index of subjects to the volume.

*A Constant Reader.*—A patient suffering from a *small* irreducible strangulated femoral hernia is better without a truss, as the pressure tends to cause inflammatory adhesion and constriction of the bowel, and so increases the danger of internal strangulation. The case as described by our correspondent reads more like one of incarcerated (obstructed irreducible) than strangulated hernia. That being so, enemata (not purges), spare liquid diet, local application of ice, and complete rest constitute the appropriate treatment. In most cases of strangulated hernia, unless gangrene of the bowel is feared, it is customary to attempt reduction under an anæsthetic before resorting to the more severe operative procedure; and this rule applies with greater force to obstructed hernia. At the same time, each case must be judged on its merits.

*A. B. C.*—Wooton's Guide to the Medical Profession (U. Gill, Strand, London) would assist our correspondent.

*Beta.*—Yes, in an early number.

### "APPLICATION OF MIDWIFERY FORCEPS."

*To the Editor of* THE LANCET.

SIR,—I should be the last in the world to despise the aid given by forceps in cases where they are really necessary, but I think there is a growing tendency among general practitioners to shorten labour by means of the forceps, especially if they be adepts in the use of the instruments. How many women there are who have to thank their impatient medical attendant, in, say, a first confinement, for a perineum ruptured into the anus—a life-long discomfort! The doctor is rarely blamed; as a rule, a woman is only too glad to get over her troubles at any price, and the medical attendant is lauded "to the skies" for his cleverness in bringing matters so quickly to an apparently successful issue. Further, I would ask those who make the diseases of women a specialty, how many of the various flexions of the uterus are due to the application of the forceps? and, again, how much their use conduces to malposition of the organ? I cannot but think that many of these troubles are due to the meddlesome, nay wicked, interference with what nature would successfully accomplish, and very much better than the doctor. In this opinion I am supported by the fact that uterine troubles in the rural districts are very rare in comparison with those existing in town practice, nature, not the doctor, doing the work.

It is argued by many that deformities in women are more common than they were formerly. I, for one, consider that Englishwomen of the present day are as well developed and as capable of going through maternity naturally as their grandmothers were. It is an easy matter, however, to point out errors, but to apply the remedy is more difficult. But here the remedy lies in ourselves, our own judgment, and the recollection of what is due to those who place themselves with such trust and confidence in our hands.—Yours faithfully,

W. AYLMER LEWIS, F.R.C.S.

Willow-street, Oswestry, April 7th, 1885.

*To the Editor of* THE LANCET.

SIR,—With reference to the above subject, permit me to describe a method of applying the forceps which I have adopted and practised for many years. I apply the lower blade first. The patient's right knee is then drawn up, and the left leg extended and drawn outwards. The upper blade is then introduced, using the left hand, the forefinger of the right hand being in the vagina to direct the blade over the head and gently press the convex edge of the blade. In this way it easily goes into its proper position and locks with the other. Extraction is then made in the ordinary manner.—Your obedient servant,

Kingussie, March, 1885. J. C. ORCHARD, L.R.C.S. Edin.

*B.* will see that the subject to which he has been so good as to direct our attention has not escaped our notice.

*T.*—Bath or Buxton.

### AN OLD MEDAL.

*To the Editor of* THE LANCET.

SIR,—I should feel much obliged to any of your correspondents who would give me information as to a medal in my possession, of which the following is a description: Diameter 1¼ in. Obverse—A pot of flowers in high relief, standing on a label, on which is the date, also in relief, 1684, and engraved on the label, evidently prepared for that purpose, the inscription, "MR. JOANNES. DE. WALL." In the exergue are the words, 'HORTUS MEDICUS." Reverse—A skeleton with scythe and hour-glass, standing in a flowery mead. The botanic gardens in Chelsea (commonly called the "Physic Garden") were not enclosed till 1686, so that a ticket of admission, which this medal evidently is, would have no *raison d'être* in 1684. Yet, I feel no doubt that its design and execution are English.

I am, Sir, yours obediently,

April 6th, 1885. M. U.

### THE RUPTURE OF BLOODVESSELS.

MM. GRÉHANT and QUINQUAUD have reported to the Paris Academy of Sciences their experiments proving that the pressure necessary to cause the rupture of arteries is much greater than that to which they are normally subjected. The carotid artery of a dog required from thirty-five to fifty-five times the normal pressure of the blood, and the jugular vein from thirty-two to forty-five times the usual force.

*Practitioner* should remonstrate with the chemist, and, failing to get satisfaction, should complain of his conduct to the President of the Council, who is at present trying to regulate the sale of poisons by legislation.

### "VEGETABLE FOOD FOR CHILDREN."

*To the Editor of* THE LANCET.

SIR,—Perhaps you will allow me to make a remark or two upon your notice under the above heading of the dinner given by Mr. S. Morley, M.P., under the auspices of the National Food Reform Society. The dinner mentioned was given with a view of showing the people of Leigh that a good dinner could be provided at small cost and yet be pleasing, wholesome, and sufficient. The menu was "Scotch broth," "lentil sandwiches," "lentil fritters," with cauliflower, potatoes, and "brown sauce," "Albert pudding," with white sauce. Whole wheat-meal bread was also given. The entire cost of dinner (for food) was under fourpence halfpenny per head. Mr. Morley and all to whom I have spoken have pronounced the dinner as having been first-class in every particular, and a good lesson in practical thrift.

In regard to non-flesh eaters being non-drinkers, I may mention that previously to my giving up "meat" I was fond of "a glass," but in three months I lost all desire or taste for strong drink. I could say much on the head of experience, as I have now been an abstainer from "meat" for upwards of seven years, and I have lost many of my former complaints. I may say that I am quite willing to place myself in the hands of any medical gentleman for the purpose of experiments in dietetics, and that without any compensation whatever. In conclusion, allow me to state that the National Food Reform Society will give its thrifty dinners when asked so to do, provided a hall, &c., is furnished free of cost. I am, Sir, yours faithfully,

F. P. DOREMUS,
Hon. Secretary, National Food Reform Society.

Finsbury-square Buildings, E.C., April 4th, 1885.

*** While we cannot agree that vegetarianism is a sound enough principle in dietetics to be generally adopted, we freely admit that an occasional change of fare of this kind is both wholesome and agreeable. Some persons also, even adults, thrive better, as a rule, on vegetable than on animal diet; or, at all events, on a diet in which vegetables markedly predominate. Such are those of gouty constitution. With regard to the effect of food on the liking of alcohol, no conclusion, we think, can yet be arrived at. Possibly the flavour of fruit may satisfy some as a substitute for its more potent derivative.—ED. L.

### NURSING STATISTICS.

*M.D.* asks: "Will any of your readers oblige by referring me to a source of information regarding the cost of nursing (apart from other sources of maintenance) in the large general hospitals of the metropolis and the provinces."

*E. De Manin.*—There is no particular objection to gas-stoves, so long as proper provision is made for carrying off the products of combustion.

### RECREATION FOR THE SOLDIERS IN THE SOUDAN.

*To the Editor of* THE LANCET.

SIR,—You were good enough to put a paragraph in THE LANCET of March 21st, saying that I would be glad to receive contributions of suitable literature for the soldiers in the Soudan. I now desire to thank the public, amongst whom are a few medical men, for the parcels they have sent; and as they have a right to know what I have done, I may say that since March 21st I have sent 5 cwt. of books, dominoes, draughts, and a few pipes to Suakim, about 4 cwt. to Dongola, and about 4 cwt. to Wady Halfa, and I think I shall be able to forward about 4 cwt. next week. I know from experience how a newspaper, six weeks old even, is valued in such a place as the Soudan, and consequently have some feeling for our brave soldiers who are now fighting our battles and suffering all manner of privations. Those who have kindly sent parcels please accept my thanks. I am, Sir, yours truly,

258, St. Philip's-road, Sheffield, April 4th, 1885. JOSIAH WILLIAMS.

### THE DEBATE ON CHOLERA.

*Mr. J. B. Scriven* writes that the report of his remarks on cholera in our last issue, page 616, is incorrect. His argument as to the cause of the viscidity of the blood may be stated thus: The almost unlimited power of absorbing fluid which the blood possesses during health has not been proved to continue in full force during an attack of cholera; so that in that disease much of the water discharged in the stools may possibly not be replaced in the blood.

*Calyx.*—1. No; choice should be made beforehand.—2. In London, two or three days before the examinations begin.—3. We are not aware of their having been published.

### ILLEGIBLE PRESCRIPTIONS.

A CORRESPONDENT from West Australia has forwarded us a prescription which, written by a brother practitioner, was handed in to his dispenser to be made up. The writing is so bad, and the figures denoting the quantity of each drug to be used so blotted and confused, that the medicine could only be made up by the knowledge of doses possessed by the dispenser. This fault of writing, through haste or carelessness, illegible prescriptions is one shared by many medical men; but it is nevertheless a grave one, and one that has frequently ere now led to serious consequences.

*J. J. J.*—A burn which destroys the skin, superficial fascia, and muscles must necessarily be followed by profuse suppuration and cicatricial contraction. The one described could not by any possibility have healed in a month. Where home comforts and careful nursing can be obtained, we consider the patient best treated out of hospital.

*E. H.* should consult his medical attendant.

*Ixion.*—We do not give advice.

### MEASLES IN GUERNSEY.

*To the Editor of* THE LANCET.

SIR,—I hope I am not in error in accepting your note under the above heading in your last issue as an invitation to make a personal explanation.

At the end of the Table of Contents in each issue of the *Glasgow Medical Journal* the following notice appears:—"Authors of original articles may, by applying to the printer, obtain twenty-five reprints of their articles gratis, and additional copies at a small cost." I obtained the twenty-five copies, and detail for your information the distribution which took place in Guernsey. Drs. Corbin, Crewe, Constantine, Conclean, Glasse, Thornhill, three personal friends (none of whom can be referred to by your correspondent) who furnished me with statistics concerning the number of cases in the schools, and the following officials: the Lieut.-Governor of Guernsey, the Bailiff of Guernsey, the Chief Constable of Guernsey, and Dr. Le Page, each received a copy of the *Journal*. I defy your correspondent to supplement this list. The copies sent to the Lieut.-Governor, the Bailiff, and the Chief Constable were sent officially, and were marked, as the enclosed copy is, on pages 2 and 3, directing their attention to the comments there on the sanitary condition of the place, a subject which has occupied them much during the past winter, and on which medical opinion was invited. The Lieut.-Governor and the Chief Constable are not patients of mine, and they received their copies addressed to them as officials at their offices.

The allegation that the recent epidemic of measles differed from the description given of it in my paper will not be much credited in Guernsey. Only those who failed to observe, or were blinded by prejudice, could make a contrary statement.

I am afraid that your notice will render it difficult for me to keep my comments on the sanitary condition of the town within the official limits which I had intended even until my reply reaches your columns. The statements made in my paper are well known to be correct, and could only have done public good while their distribution was limited to those concerned in the local sanitary administration.

I am, Sir, your obedient servant,
Guernsey, April 4th, 1885. J. AIKMAN.

*To the Editor of* THE LANCET.

SIR,—My attention has been drawn to an extract from THE LANCET of the 4th inst., in which exception is taken to Dr. Aikman's action in sending copies of his paper in the *Glasgow Medical Journal* on the Epidemic of Measles in Guernsey to the patients of another medical man. As I received a copy of his paper from Dr. Aikman, and may be one of the recipients alluded to, I ask your permission to state that I, as Lieut.-Governor of Guernsey, have publicly interested myself in the sanitary state of the island, and have no idea that the paper was sent to me except in my official capacity.

I have the honour to be, Sir, your obedient servant,
H. A. SARRE, Major-General.
Bournemouth, April 7th, 1885. Lieutenant-Governor of Guernsey.

*To the Editor of* THE LANCET.

SIR,—At Dr. Aikman's request, I hereby beg to state that I received a copy of the reprint of his notes on a recent epidemic of measles in Guernsey, addressed to me at the Constable's Office in my official capacity; also that the copy was marked at the passages referring to the sanitation of the town.—Yours faithfully,
Guernsey, April 4th, 1885. JULIUS A. CAREY, Chief Constable.

*** We think Dr. Aikman's letter satisfactory. Moreover, we have read the paper on Measles, and cannot see anything in it to justify the complaints made. The epidemic had been very extensive and rather severe, and was the more noticeable as being rare in the island.—ED. L.

### PREVENTION OF CARBUNCLE IN CATTLE BY VACCINATION.

*To the Editor of* THE LANCET.

SIR,—I should be much obliged if any of your readers could tell me where I can get lymph for "vaccinating" cattle as a preventive against carbuncle. I believe Pasteur is the discoverer of the method and preparation. I am, Sir, your obedient servant,
April 7th, 1885. F. G. V.

### WHOOPING-COUGH.

*Mr. C. Clark Burman, L.R.C.P. & S. Ed.* (Belford, Northumberland), solicits replies to the following questions:—(1) Are the paroxysms of whooping-cough more frequent always at night, whether the patient sleeps or not? (2) At what hours of the night are they most apt to occur? (3) What relation do they bear to the sleep of the child—i.e., during profound sleep or otherwise? (4) What circumstances appear to induce them?

*Mr. W. Holderness.*—1. Berkeley Hill's work on Bandaging and Minor Surgery.—2. Lewis S. Pilcher's Treatment of Wounds. The latter, an American work, is one of the best on the subject with which we are acquainted. It is published by Messrs. William Wood and Co., 56, and 58, Lafayette-place, New York.

### THE BIRMINGHAM MEDICAL INSTITUTE.

*To the Editor of* THE LANCET.

SIR,—The interesting account, given in to-day's issue of THE LANCET, of the Birmingham Medical Institute, ought to make one glow with pride at having the privilege of living even within two or three miles of such a noble and generous Society. But, Sir, there is another side to the picture, and this, I am sure, out of regard for your time-honoured maxim, *Audi alteram partem*, you will allow me to present with the pen of a truthful but not unfriendly critic.

Rather more than a year ago a "registered practitioner" applied to the sub-librarian of the above-named Society for information as to the steps to be taken to enable him to avail himself of the library. He was told by that official that the payment of a guinea was the chief thing required, although there was another ceremony to be observed, which, however, was a "mere form." The ceremony thus described as a "mere form" was the signing by six members of the institute of a paper left in the reading room for that purpose. The "registered practitioner" paid the fee, and in due course two signatures were affixed to the paper. Then in a short time the document disappeared altogether, leaving the "registered practitioner" to believe that the "mere form" had been duly complied with. His surprise, however, was great when, three months afterwards, on applying for a book, he was told that he was not a member. On further inquiry he learned that the signatures referred to had been withdrawn at the dictation of a "distinguished hospital surgeon," who had forbidden his name to be divulged. I regret to say that the "registered practitioner" lost his temper on this occasion, though I do not much wonder that he yielded to this infirmity. To have been blackballed by a ballot would have been intelligible, and timely notice would have been given of the result; but the above-described method of procedure seems both ill-natured and illiberal. The "registered practitioner" has no complaint to make against the officials of the Society, either honorary or paid, but he would like to see the "distinguished hospital surgeon" emerge from his Olympian cloud and give some explanation of his conduct.—Yours obediently,
Birmingham, April 4th, 1885. WILLIAM J. NOTLEY, M.D.

*F.R.C.S.*—Reports from Her Majesty's Representatives at European Courts and in the United States on the Working of the Lunacy Laws in the Countries in which they reside. Miscellaneous, No. 1 (1885). Messrs. Hansard, 13, Great Queen-street, W.C.

*Mr. E. Playfar.*—We do not think it would serve any good purpose to open the discussion our correspondent suggests. There can be no doubt of "the present usefulness of the practice."

### "A HALFPENNY A WEEK."

*To the Editor of* THE LANCET.

SIR,—In answer to an annotation under the above heading, which appeared in your issue of March 21st, the Committee of the Working Men's Medical Society at Sheerness would like to correct the serious errors made in that statement. As to there being some sixty applicants who applied for the position as advertised in THE LANCET of March 7th, it is due to them and others to know that the working men of Sheerness did not expect a medical gentleman to work on such unremunerative terms as appeared in the paragraph alluded to. A similar Society to ours has been in existence this past forty years; it is true our contribution is only one halfpenny per week, but it is for each individual entered, which on a little consideration will show that the scheme is very feasible. Let us give a short digest of how our Society now stands, and we think it will conclusively show the different gentlemen who applied that what we stated in our advertisement was more than correct.

The Society was inaugurated on March 1st, 1885; our present number of members (March 29th) is about 3800, which gives £411 per annum, the accouchement fee for members' wives are paid in addition to these contributions, which would equal another £150, making a total of about £560 per annum; private practice is also allowed. *None* of the above amounts are deducted for working expenses.

In reference to the paragraph alluding to the Portsmouth Association, it was stated at the meeting that they paid their doctors about £300 and £400 per annum each, and not, as represented, that amount divided between them. We hope this statement will satisfy those gentlemen who have written to us on this subject since the erroneous insertion of March 21st. I am, Sir, yours respectfully,
THOS. LOVATT, Secretary,
For the Committee of the Working Men's Medical Society.
Marine Town, Sheerness, April 6th, 1885.

### A CAUTION.

*Mr. Rocke Lynch*, of Boyle-terrace, Holland-park, would caution his professional brethren against a "broad-shouldered man, forty or fifty years of age, with sandy whiskers," who, representing himself as an agent of a certain firm, called at his house under pretence of seeking information about some person, and who, being shown into Mr. Lynch's consulting-room, made off with a surgical instrument which happened to be lying on the table.

*A Subscriber* will find a whole series of the measurements of which he is in quest on pp. 635–637 of Woodman and Tidy's Handbook of Forensic Medicine and Toxicology. Churchill, 1877.

*M.B.*—Jevons' Logic, Ribot's Psychology, Killick's Abstract of Mill.

### MEDICAL PRACTICE IN THE UNITED STATES.

*To the Editor of* THE LANCET.

SIR,—If any of your readers have had experience of medical practice in the Southern States of N. America, perhaps they will kindly inform me through your columns what prospects there are in any of the large cities for a London physician, and what qualifications he must obtain in the United States to permit of his practising there, provided he is a L.R.C.P. and M.R.C.S.L. I am aware that in Canada an English medical man must take out a licence to practise before he can put up his "shingle" in the colony. Relying upon your usual courtesy to insert this letter,

I remain, Sir, yours obediently,

April 7th, 1885. MEDICUS.

### A CORRECTION.

*To the Editor of* THE LANCET.

SIR,—Most misprints may be passed over as unimportant. But in the abstract of my paper read at the Medical Officers of Health Society, page 622, third line from top, "the element of *lime*" should be "the element of *time*," and I fear, unless corrected, it will give the impression that I think highly of lime as a disinfectant.—Yours truly,

Wellington-road, N.W., April 5th, 1885. A. WYNTER BLYTH.

### "HYDROCHLORATE OF COCAINE."

*To the Editor of* THE LANCET.

SIR,—In reply to Mr. Symes's letter, which appeared in your last issue, I beg to state that the filtered cocaine solution which I mentioned in my first communication to THE LANCET has been used at this hospital with the most satisfactory results.—Yours faithfully,

Sussex Eye Hospital, April 8th, 1885. J. CHURCHYARD.

ERRATUM.—In Mr. B. Roth's remarks, page 619 of our last issue, for "Fletcher's bags" read "*Fleming's* bags."

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Wilks, London; Dr. W. Squire, London; Dr. Saundby, Birmingham; Dr. M. Oxley, Liverpool; Mr. T. Holmes, London; Mr. Rushton Parker, Liverpool; Professor De Chaumont, Netley; Mr. Husband, Leeds; Dr. Goodhart, London; Prof. Wharton Jones, Ventnor; Dr. Eben. Watson, Glasgow; Mr. J. Oliver, London; Mr. C. Boyce, Maidstone; Surgeon-Major Sargent, Bedford; Dr. Rogers, Ventnor; Dr. W. J. Notley, Birmingham; Mr. Bothamley, Bromley; Dr. G. Oliver, Harrogate; Dr. R. Neale, London; Mr. Wynter Blyth, London; Mr. C. C. Burman, Belford; Dr. Hingston Fox, London; Mr. Dartnell, Limerick; Dr. Dingley, Wolverhampton; Mr. S. Snell, Sheffield; Dr. Scriven, London; Mr. B. Roth, London; Dr. C. Dibdin, London; Surgeon-General Longmore, Netley; Mr. J. B. Crozier, London; Mr. Holderness; Mr. Whitefoord, London; Dr. Alder Smith, London; Mr. J. Williams, Sheffield; Mr. F. P. Doremus, London; Dr. Aikman, Guernsey; Mr. A. Hodgson; Mr. W. Wickham Polmont; Mr. W. H. Kesteven, London; Mr. G. J. B. Stevens, London; Mr. J. D. Mercier, Rhyl; Mr. Lewers, London; Mr. Grant, Birmingham; Mr. Barff, London; Messrs. Smith and Son, Manchester; Mr. Bell, New York; Messrs. Wood and Co., New York Mr. Heywood, Manchester; Mr. Fuge, Taunton; Messrs. Austin and Son, Clifton; Mr. Burband, Leeds; Mr. Steel, London; Dr. Valentine, New York; Messrs. Riddle and Co., London; Messrs. Bosworth and Stein, London; Mr. Connelly, Ireland; Messrs. Hammond and Co., Birmingham; Mr. Ponsford, London; Mrs. Pratt, Cardiff; Dr. Skerry, Bristol; Dr. McNaughton Jones, London; Mr. Turner, Colchester; Mr. Armstrong, Manchester; Dr. Thomas, Glasgow; Mr. Fry, Swindon; Messrs. Crossley and Co., London; Mr. Cortishley, Macclesfield; Mr. Taylor, Buxton; Mr. Mason, Oldham; Mr. C. P. Elliott, West Australia; Mr. C. A. Thimm, London; Mr. L. Jeffery, Eastbourne; Mr. Mallins, Watton; Mr. Godlee, London; Dr. Durand-Fardel, Paris; Dr. Sidly, Edinburgh; Mr. Nickels; Dr. Maclagan, Hexham; Mr. Pryn, Devonport; Mr. W. T. Brooks, Oxford; Mr. B. Hewetson, Leeds; Mr. Tallack, London; Dr. Kinkead, Galway; Mr. C. F. Rideal; Mr. Churchyard; Mr. Cantlie, London; Mr. Roche Lynch, London; Mr. Leslie, Manchester; Messrs. Squire and Sons, London; Mr. Pentland, Edinburgh; Messrs. Reynolds and Branson, Leeds; Dr. Buchanan, Glasgow; Mr. Mosse; Mr. Heaton, Hornecastle; Mr. Symons, Dumfries; Messrs. Brooks and Co., London; Mr. W. H. Kesteven, London; A Surgical Nurse; M.B.; Justice; Medicus; M.D.; B.; Veritas; Calyx; A Constant Reader; Practitioner; A Solicitor; A. B. C.; B. X.; Thyra, London; W. B., Southampton; Publicity; Albus, Leicester; Count.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Diver; Mr. White, Bayswater; Mr. Sankey, Maidstone; Messrs. Mackay, Edinburgh; Mr. Grange, Leeds; Mr. Wheeler; Messrs. Hammond and Co., Birmingham; Mr. Harold, Carmarthen; Mr. Nickoll, Victoria; Mr. Foord, Colchester; Mrs. Ford, Clapham; Mr. Broom, Cardiff; Dr. Hicks, Hendon; Mr. Mason, Highbury; Dr. Duncan, Victoria, Australia; Mr. Inglis; Mr. Campbell; Mr. Playter, Ottowa, Canada; Mr. Whipp, Burton; Mr. Pilkin, Ormskirk; Mr. Morgan, Islington; Mr. Pope, Sandbach; Dr. Kerr, London; Mr. Leslie, Manchester; Messrs. Mulliner and Co., Northampton; Messrs. Lee and Martin, Birmingham; Mr. Cooper, Clonmel; Messrs. Wyer and Hartley, London; Mr. Beckwith, New Haven, U.S.A.; Mr. Croke, Hull; Mr. Illingworth, Clayton-le-Moors; Mr. Redpath, Norwood; Dr. Trimmer, Ganglingay; Dr. Turner, Finsbury; Messrs. Slinger and Son, York; Dr. Eberle, Thirsk; Messrs. Edmunds and Co., Walbrook; Mr. England, Winchester; Dr. McKinder; Dr. Christison, Montrose; Mr. Fowler, Hammersmith; Messrs. Porteus and Co., Glasgow; Habana, London; Medicus, Bolton; M.R.C.S., Sheffield; Surgeon, Burnley; M.B., Oldham; J. G., Ironbridge; L.S.A.; Matron, Suffolk General Hospital; C. C. C.; Forceps, Bolton; Medicus, Basingstoke; M. S. S., London; J. L., Llandyssil; Quill Pen; Medical Officer, Lincoln; Medicus, Chatham; M.B., Manchester; M. Y., Cannock W. G. D.; Beta, Cleator; M. G.; Medicus, Southport; W. B. M., Burnley; Alpha, Sheffield; Physician, Southsea; Medicus, Child' Hill; H. B.; R. C. P., New Haven; Beta; A. B., Pimlico; Delta, Victoria-park; Lady Superintendent, Cambridge; Medicus, Stratford; M.R.C.S.; Physician, London; J. R.; Medicus, St. John's-wood; M., Huntingdon; J. W. D., Barnsbury.

*Liverpool Mercury, Lincoln Gazette, London Figaro, Lincolnshire Chronicle, Cork Constitution, New York Daily Tribune, Hull News, Sunderland Echo, Kentish Express, Sunderland Herald, Croydon Advertiser, Newton Herald, American Eagle, Health Assurance Record, The Policyholder, &c.*, have been received.


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